The Journal of Educational Method

VOLUME V NOVEMBER, 1925 NUMBER 3

EDITORIALLY SPEAKING

THE ENGLISH INVESTIGATION

With no fanfare of trumpets or advance agency work, the National Council of Teachers of English has entered upon an investigation likely to be far-reaching in its influence. Previous studies made by this organization have been carried on with the coöperation of teachers and school officers alone. This latest study is enlisting the interest of professional and business men, homemakers, and typical members of the community generally.

The committee in charge of the investigation, of which Mr. John M. Clapp, one of the founders of the Council, is the chairman, selected as the topic for the current year's work, "The Place of English in American Life." It prepared an elaborate questionnaire covering the uses to which the American language may ordinarily be put, with the purpose of finding out how the training and culture of our citizens are most in need of improvement. It was believed that the testimonies of persons not connected with schools and colleges would be a valuable check upon the policies which these institutions are pursuing at the present time. Provision was made for very specific confidential statements as well as for the answers called for by the questions presented in the query sheet itself.

To insure an adequate and representative response, the committee organized local groups in towns and cities in all parts of the country. By this means several thousand questionnaires were distributed. In addition to this, correspondence was begun with men and women of wide experience in various centers. In this way an attempt was made to get an accurate cross-section of American public opinion as regards the place which language actually occupies in our social life and as to the need of improvement in particular phases of its use.

Advance reports indicate that the efforts of the committee have been well placed. A widespread interest in the investigation was evident from the first. A large number of substantial citizens have been examining into the situation and have given their views as to language needs not now adequately met. The material is at hand for a careful and searching interpretation and the committee's report, which will be presented at the annual meeting of the Council in Chicago at Thanksgiving, is eagerly awaited.

If nothing more is accomplished than the establishing of a new point of view as to the question of our speech, the funds of the Council will have been well spent. In contrast to proposed attempts to survey high-school teaching with reference to college entrance, the effort of the Council has been to steer clear of the traditional and the academic. College-trained teachers have made high-school English what it is. If it has shortcomings, as no doubt it has, these are not to be overcome by a fresh appeal to higher authorities. College English is quite as much in need of a new program as the English of the schools. What is needed is to find a way out of the vicious circle in which the academic mind is inclined to travel. That way, at least as a first step, is clearly by means of direct appeal to the ultimate consumer. Language is far and away the most important single factor in the national life. Our present command of it is obviously insufficient. What we need first to know is wherein it falls short, not in general but in particular. Once we know that, we shall have the necessary basis on which to proceed in evaluating present educational procedures in the teaching of English and in devising new ones.

SCIENTIFIC EDUCATION AS A DEFENSE AGAINST PROPAGANDA AND DOGMA[1]

BENJAMIN C. GRUENBERG
Managing Director, American Association for Medical Progress, New York

Everybody believes that truth is necessary for the people's welfare and salvation, just as vitamins are necessary for the healthy development of a child. Teachers are therefore called upon to improve the minds and morals of the people by imposing upon them the accepted truth, just as a conscientious mother resorts to forcible feeding when she discovers the importance of spinach and cod liver oil.

In our daily teaching we are often confronted by the dilemma represented by the alternatives as formulated by Bryan. We must choose between teaching what Bryan contemptuously calls "guesses of scientists," and teaching what he complacently calls "the Word of God." It does not help much to protest that the guesses of science often come very close to demonstrable truth, nor does it help much to point out that Bryan's categories virtually beg the question. Our sad predicament arises from the very foundations of our educational purposes.

It is this view, namely, that teaching is to impose truth, that was in the past responsible for persecutions and inquisitions, and it is this view that is today responsible for a hundred statutes that we consider foolish, or worse, but against which we feel perfectly helpless. Here belong the legislation against the teaching of evolution, or for the standardization of *pi* as three without any fractions, or for the elimination of objectionable teachings from history textbooks, or for compulsory worship of selected portions of the United States Constitution to the exclusion of others, and

[1] Read before the Department of Science Instruction, National Education Association, Indianapolis, June 29, 1925.

similar efforts to protect children against false teachings and agitators and to insure their possession of sound doctrine.

Here belong censorship of libraries and of teachers' readings, the Lusk laws of New York, and the Ohio committee to inquire into the heresies of state university instructors. About a dozen states have laws requiring the daily reading of the Bible in public schools; about as many have laws forbidding the reading of the Bible in the public schools—both for fundamentally the same reasons.[1]

It is this view of truth and of teaching that has in the past made possible the ruthless coercion of whole peoples into the support of tyrannies and unholy wars; and it is this view that is today responsible for a similar coercion of whole peoples into the support of tyrannies and unholy peace.

The writer of a magazine article published within the year makes claim or confession to having destroyed some letters by George Washington in a private library, because the letters had certain smutty spots in them, in order to preserve the "ideal" of Washington held by the uninformed. In several states grown men and women have been carefully reading new textbooks in civics and history, searching for words or passages that might undermine the patriotism of our children. The theory behind much of this solicitude seems to be that devotion to country depends upon the country being superior in every respect to all others of the present and of all time, including the future; every intimation that its heroes were anything less than demi-gods and every suggestion for improvement are considered attacks upon its perfection. It is, of course, conceivable that patriotism or affection for our country is like affection for our parents or our children—not the *result* of the love object having attained perfection, but the *motive* of our devotion and effort and sacrifice for its welfare and improvement. We might compare our intellectual loyalties to these emotional ones: is it our duty to insist that what we believe is true, or to seek the truth regardless of what others—or we ourselves—have hitherto believed?

In many states the laws require the teaching of physiology and hygiene, which are useful for all as science and art; but in many cases the statutes prescribe the inclusion of teaching about the evil effects of tobacco and alcohol—which is neither science nor art, but doctrine. If you disapprove of the doctrine you may call it propaganda; if you approve of it, you may call it sound doctrine. But it is doctrine.

In many cities the physiology and biology teaching have been under more or less direct attack, not on the ground that science teachers are doctrinaires but on the ground that they present obnoxious doctrines, such as the unity of all life, or the non-transfer of maternal impressions or acquired traits, or the so-called "germ-theory" of disease. We accept propaganda and are misled by it because we are as a people dogmatic and committed to the doctrine that we are guided by sound doctrines.

This view of truth and of teaching is so ancient, so well established, and so widely

[1] Since the above was written, I have received information from the United States Bureau of Education stating that the reading of the Bible in public schools is explicitly required by law in Alabama, Delaware, Florida, Georgia, Idaho, Kentucky, Maine, Massachusetts, New Jersey, Pennsylvania, and Tennessee. It is not permissible to read the Bible in public schools of Arizona, Illinois, Louisiana, Minnesota, Nevada, New York (outside of New York City), Washington, Wisconsin, and Wyoming. There have been court decisions adverse to Bible reading in the public schools of at least four states (California, Illinois, Louisiana, and Wisconsin); and there have been court decisions favorable to Bible reading in the public schools of at least six states (Kentucky, Maine, Massachusetts, Michigan, Nebraska, and Ohio).

accepted that even teachers of science succumb to it, even while we are engaged in the teaching of science. In fact, we often take so much delight in exposing the errors of our predecessors that we help to fix more firmly than ever the notion that we have at last attained to true beliefs.

It is a part of the teaching process, where we are concerned with science, to help even young children to realize that things are not always what they seem. The earth, for example, comes into the child's experience as a vast plane, with more or less surface irregularity. We teach him that in truth the earth is round; and he believes us. Has the earth changed its appearance to him? Does he now visualize a sphere swinging majestically in space, among millions of others, most of them larger and swinging even more majestically? Does he actually picture to himself the daily rotation, and feel the roundness of the earth as a help in unifying many familiar phenomena? Well, sometimes he does; but alas, even a teacher of geography can retain for a lifetime an identification of "north" with "up," and can be sure of the roundness of the earth only because he can remember the enumerated "proofs." For most children, however, one doctrine displaces another; and without being very clear as to what it all means, they can display cruel derision for the ignoramus who still believes the earth to be flat as in all good conscience and common sense it appears to be.

What is gained by such teaching? We can impress children with the ignorance of the untutored, with the stupidity of our ancestors, with the superiority of our own enlightenment, with the mysterious ways of science. As citizen and as prospective teacher, the child exposed to such teaching becomes, intellectually, as complacent as any person with a closed book and a closed mind. Does it ever occur to us that for many people the roundness or flatness of the earth is still an open question; or that for still more people the assumptions may be totally different from ours; or that new discoveries may again reopen the question for those who think as we do? While this is an extreme example, it is typical in its results of much of our teaching.

It is part of the business of science teaching to make people, including children, realize what is involved in the progress of human knowledge. The ancients were not fools; they knew what they knew and made the best use they could of their knowledge. Wherein do we better today? We have indeed accumulated more facts. We have refined the instruments for seeing the immensely far and the wonderfully minute, we can detect and measure happenings beyond the reach of our senses. We have poked into corners of the earth not previously visited by man, and have dug deep into her bowels; we have climbed the tallest peaks and have floated high above the clouds. We have explored the bottom of the ocean and have disclosed events of prehistoric times. We have millions of facts not accessible to Socrates or Solomon. But these facts alone give us neither science nor wisdom.

It is part of the business of science to disclose new facts, to refine and make more precise old facts. And so it becomes part of the business of science teaching to familiarize the world, including pupils, with some of the facts. But that alone is of small moment. There are more planets than Kopernicus studied, more continents than Columbus knew, more elements than Mendeljeff counted, more species than Linnæus listed. Since the time of Galileo and his telescope we have weighed and measured the heavenly bodies, determined their distances and movements and chemical composition to a degree of accuracy and of comprehensiveness far beyond the

wildest imaginings he might have indulged himself. But what of it? Do we need to teach any considerable portion of these millions of facts? Even the teacher does not need most of them.

After all, neither the scientist nor the man in the street is concerned with the million new facts primarily. Both are concerned with conclusions from facts, with general principles, with interpretations and applications. We are sometimes impatient of the extremely practical person who asks about a research, "What can you do with it?" We feel, quite properly, that research in science cannot be evaluated in terms of immediate application. We feel, quite properly, that science has amply justified itself as a spiritual adventure which has brought us larger visions of human possibilities, deeper insight into nature and man, even if it never added a cent to the economic productivity of the day's work. Nevertheless, the practical man's query deserves a dignified reply. It is precisely because we do believe that truth—truth of science—will make us free, will influence conduct in a way that matters, will modify practical affairs, that we take our teaching so seriously.

While the investigator may spend days or years in pursuit of an elusive fact, it is not this fact that the rest of the world cares about. We want the larger truth of which this fact is but a fragment. Moreover, the investigator in pursuit of an elusive fact sometimes bags something much bigger. Curie did not go out to find radium; Pasteur did not go out to discover the pathogenic microbes; Metchnikoff was not looking for phagocytes, just as Columbus was not in search of new continents. We believe that such searchings should be encouraged, not merely tolerated; and we believe that the results of such searchings, the truths revealed to the human spirit, even though they are fragmentary, should be taught without restraint. In the long run such truth is important and will prevail.

There is something, however, to be said for the obstructionist, who wants only his grandfather's truths taught; and for the legislator who is looking after the interests of the public. The latter makes the plausible claim that those who pay for education have the right to select what they are to pay for. The teacher may have whatever opinions he likes; but he has no right to teach the children what the parents and taxpayers do *not* like. The parents and taxpayers, since they supply the pupils and the teacher's salary, have the decision in their hands.

So long as teachers concede that the business of teaching is to transmit sound doctrines; so long as they admit that in a controversial issue one opinion is right and others wrong, the legislators are doing their duty in prescribing and proscribing our teaching. On the assumptions stated, they have responsibilities that they can meet in no other way. Personally I consider both assumptions utterly untenable, and the conclusions therefore unwarranted.

The assumption that the school is to transmit sound doctrine I consider untenable because it implies in its turn both the attainability of absolute truth and its having been attained. If modern studies in the various branches that have been affected by the scientific method teach us anything, they teach us that in varying regions people clung earnestly and tenaciously to varying truths; and that in any one region, people have at various times held just as earnestly and tenaciously to varying truths. Moreover, our conscious efforts to discover criteria of truth, which have been characteristic of centuries of thinking, have during the period of science led to abandonment by scientists of the pursuit of the absolute. The scientist is in-

deed positive as to what he knows; but he distinguishes rigorously between ascertained facts, facts which others can confirm, and conclusions drawn from these facts. He distinguishes his facts of observation on the one hand from his postulates, and on the other hand from the inductions or generalizations which he constructs from those facts. It is our business as teachers of science to lead our pupils to make these distinctions for themselves, by making them conscious of postulates and of generalizations as such. We assume, for example, the conservation of matter and of energy: this postulate cannot be "proved" in any strict sense, yet all of our quantitative work in business and in industry, in medicine and in commerce, no less than in research, rests upon it. Moreover, while we cannot prove it, neither can we think straight nor carry on satisfactorily without it. We must "believe" this, but we must know both the warrant and the purpose of our belief.

Again, we assume the principle of adequate cause and the principle of uniformity without being able to prove them. We ought to know and our pupils ought to know that from the nature of things every induction must rest on limited data or facts; and that every deduction is in effect an interpolation or an exterpolation that may or may not accord with reality. We apply these assumptions with the utmost confidence when we build bridges, when we chlorinate a water supply, when we use a complement fixation test, when we administer antitoxin. Once in so often a bridge collapses, typhoid fever appears in Chicago, the pathologist's findings are misinterpreted, diphtheria is accompanied by anaphylaxis. Disasters do occur in spite of our best knowledge; and disasters are irreversible; but they should at least teach us to improve our technique for the next day. From the standpoint of science, they rectify and refine our fragmentary generalizations.

We must ourselves distinguish between opinions and facts, and teach our pupils so to distinguish. Science teaching must make those taught conscious of the working hypothesis as an instrument of thought, not as a finality, or as an authoritative opinion to oppose to the opinions of others. The truth that most people take so seriously as something to teach, or not to teach, is in most cases a more or less elaborate, more or less supportable opinion. There are no "sound doctrines" except detailed facts, which for the most part are useless or uninteresting, and well-considered hypotheses, which should, however, be taught as hypotheses and therefore subject to change.

Some four years ago, when amusement and consternation were being scattered to all parts of the country by the press accounts of the efforts of the state of Kentucky to pass a law prohibiting the teaching of evolution in tax-supported schools, a faculty conference was held in one of the universities to consider the position university professors ought to take on the controversy then raging. One of the professors is reported to have said, in effect, "If the proposed law prohibits the teaching of the Darwinian hypothesis, then it is bad legislation and we ought to oppose it. If, however, it undertakes to prohibit the teaching of Darwinism as an established fact, that is different; and the legislation cannot be harmful, even though unnecessary." To this a professor of zoölogy is said to have rejoined, "Darwinism is not an hypothesis, it is an established fact." I do not know who these professors were, but in this case the professor who was supposed to be scientific, because he taught one of the sciences, certainly had something to learn from the professor of philosophy.

The assumption that the authorities or

taxpayers have the right to choose what doctrines or opinions are to be taught I consider untenable because from the nature of our institutions and of our social development it has already become impossible for most laymen to form intelligent judgments in technical fields. We need more and more schooling precisely because our scientific knowledge is rapidly outrunning popular knowledge. The child has to learn vastly more than his parents can possibly know; and the parent is in no better position to decide in detail what and how his children should be taught than the legislator is to decide how the doctor is to diagnose and treat his ailments. When you go to the store you may buy whatever pleases your fancy, if you can afford the price. When you go to the doctor, you may think you know what you want; but if he is an honest professional man he will not ask you what he is to write on the prescription. When you place the manufacturer's child in my science classroom or laboratory, neither the father nor the school superintendent nor the governor can tell me what I am going to teach, or how. If I am not a better judge of these things than the taxpayer or the legislator, I am not fit to hold the job.

As for those who want their own brand of doctrine taught, we may have some sympathy for their feelings, but we can make no concession to their wishes. Their wishes are also based on an assumption of absolute truth. They hope to get their doctrines adopted as teaching material by force of numbers, by majority in the legislature. This is on the theory that the public is entitled to what it wants, whether it is in the way of a bond issue for roads or in the way of a central water supply, or a theory of cosmogony. As teachers of science we cannot concede that the ballot is an effective instrument for discovering the kind of truths that concern us.

The place of doctrine in the school is closely related to the place of propaganda in the community at large. So long as all teaching as well as all thinking was dominated by the assumption that we had truth to begin with, it was not only proper for each group to tell the rest of the world, but for those who took their doctrines seriously it was a duty to enlighten the heathen. Doctrines affecting all aspects of life emerged out of a comparatively few general concepts regarding the nature of the universe, and were closely connected with what we sometimes call religious beliefs. Even today there are many groups that cannot divorce folklore from theology and theology from such highly technical problems as medicine, agriculture, meteorology, and astronomy.

We cannot blame people who suffer from such fixations, but we have to recognize that one of the great difficulties arises from the ease with which the human infant does learn. If you tell a very young child a fairy tale which he likes, you have to be careful when you repeat the story to get the details exactly right. The contents of Little Red Riding Hood's basket are determined once and for all by the first account and no deviation from the standard equipment will be tolerated. This is typical of the method by which obstacles to learning and enlightenment become thoroughly fixed during early years of life; and for our purpose these include the years of progressive schooling.

Thirty to forty years ago, children were being taught that the adult mosquito is an ephemeral of some eighteen hours' life span. Experiments on the transmission of malaria by the mosquito brought results in conflict with this doctrine: many could not believe the new teaching because it involved for Anopheles a life span of two or three weeks. Moreover, many had been taught that the female mosquito has one good meal,

lays her eggs, and perishes—by analogy, no doubt, from other insects. The new doctrine gave the animal at least two meals, and that was hard to reconcile with earlier teaching. Finally, the very name of the disease, *malaria,* was for millions of people associated with the doctrine of bad air, bad night air, usually, as an etiological factor, and with the corresponding applications to life.

Language fixations are much more common than most teachers seem to recognize, and probably most of us are ourselves somewhat handicapped by them and their implications. Many still speak absent-mindedly of water seeking—and finding—its own level, while the child sincerely wonders how the little drops can be so clever. We read in recent texts that the hind legs of the whale and the eyes of cave fishes have disappeared *through disuse;* and in later pages of the same texts, clear intimations that Lamarck was probably mistaken. Or we read that the stem *provides* a path for carrying material from the roots to the leaves, and other materials in the reverse direction; while later chapters tell us plainly that a conscious anticipation of future conditions and needs depends upon a rather complex nervous system, which the stem obviously lacks.

Most people, even those with high I Q's, attach sacredness to various concepts or mere formulæ acquired early in life, with the simplicity and earnestness that young children feel about their precious treasures. Those who worship symbols that have no meaning to us we consider heathen or idolators; while we worship our own symbols and cannot understand the indifference of the barbarian. The early conventions thus become serious obstacles to the later development of an objective consideration of facts and problems. Like the Briton in *Cæsar and Cleopatra,* we think that our provincial customs are Laws of Nature. The uncritical acceptance of this situation is characteristic of large numbers of people who have learned what they know only too well; and it results in bigotry, dogmatism, and attempts to legislate doctrine into the schools and into the lives of other people.

With the development of scientific methods and scientific ideals, and especially with the systematic introduction of science teaching into the public schools, indoctrination as a method and the true faith as an end must gradually be removed from education. Children will for a long time continue to come to school saturated in superstition and anchored to rigid prejudices. Parents will for a long time continue to protest at our efforts to analyze the objective world and our traditional concepts. We shall have to be patient, and we shall have to be at least as tolerant of their absurd doctrines as we want them to be of our alarming heresies. But we shall have to rely upon our scientific method and not be tempted into controversy or propaganda on our own account; for if we have faith in the validity of scientific methods, we need not be too greatly concerned about what our pupils believe for the time being. If we can get people into the habit of asking, "What are the facts in the case?" or, "What is the reliability or accuracy of these facts?" we shall not need to insist upon our own views, we shall not need to proclaim our doctrines with vehemence and with megaphones.

The science teacher must take his place with other professional workers and insist upon the right to speak authoritatively in his field. This would mean the right to decide what and how he will teach. The reciprocal obligation is that of being thoroughly qualified to discharge the responsibility that should go with so much power. His qualification will rest not upon his mastery of a body of doctrine, nor upon

his subscribing to accepted beliefs; it will rest upon his mastery of a point of view and upon his thoroughgoing and honest reliance upon science at every step.

It is altogether too easy to proclaim our superiority by casting ridicule upon superseded beliefs and practices. Of course it is absurd to believe that nature hates a vacuum, or that wicked spirits cause acute infectious diseases, or that the shape of a leaf shows the kind of sickness it can cure; but it was not absurd to believe such notions when they represented the best knowledge available. Our superiority lies not in having attained true beliefs, but in having acquired the habit of analyzing and formulating our own assumptions and in having acquired a technique for testing our "beliefs"—that is, our working hypotheses.

In an age that depends as does ours upon a day by day application of science to the health of the people, to the supplying of common necessities, to transportation and communication, to recreation and to other accessories that make life interesting, the teacher of sciences stands in a position of peculiar responsibility, for it is his work at every level of instruction that will determine the attitude of masses of people toward fundamental issues. Where peoples have been brought up to attach the greatest significance to what is believed, the science teacher must get them to realize the significance of understanding the basis of belief. Where tradition implies that "truth" is in some sense eternal, the science teacher must get people to realize that our knowledge grows by constant revision and adjustment of approximations to reality.

The business man has been influenced by the growth of science in so far as it directly affects his material interests: he has learned to scrap expensive machinery to make way for better machinery. As a people we have to learn to do this with the most precious machinery we have, namely, the ideas through which in the end we control our material surroundings and hold our far from perfect own against a hostile universe. Science teaching should include the teaching of this practice: every principle is held subject to good service, and subject to replacement by a better principle. It ought to be impossible, eventually, to discredit the work of scientists because doctors did at one time believe in humors or bleeding, whereas today they believe in germs and vaccines; or because chemists at one time believed in atoms and today believe in electrons.

Those who have given some thought to education cannot escape the feeling that the school must somehow transmit to youth the gains of past experience. If science is to be always tentative and forward-reaching and theoretical, it will seem to many, even to many teachers, to have nothing of lasting value. It is nevertheless this very characteristic of science that gives it lasting value. The facts of science are overshadowed by new facts. The theories of science are replaced by new theories—not altogether replaced, but notably modified; it is therefore futile to impress our pupils too insistently with the striking facts newly revealed, or with plausible theories assimilated during our own impressionable years. Our insistence should be upon the principles that entitle science to a hearing: the reliance upon fact, the measurement and reproduction of fact, the honest facing of negative instances, nay, the eager quest for negative instances, the distinction between fact and theory, the experimental method, the frank acceptance of hypothesis as subject to revision, and the open mind ever ready to revise its postulates. It is the method of science that will enable us to counteract propaganda, and that will equip our pupils to meet the onslaughts of propaganda and dogmatism.

FLASH CARDS AS A METHOD OF IMPROVING SILENT READING IN THE THIRD GRADE[1]

ROBERT E. SCOTT

Superintendent of Schools, St. Louis Park, Minnesota

In the past almost all the emphasis in the elementary school has been placed upon oral reading. Silent reading was entirely neglected except as it came incidentally in the day's classwork. At the present time, however, prominent educators are devoting considerable attention to the importance of silent reading, and many of the best school systems of the country are changing their courses of study in reading to conform to this most important subject.

Judd says that schools should teach silent reading in regular specific exercise with a definite technique rather than to assume that the transition from oral to silent reading will come at the proper time without waste or effort.[2]

A more recent development has been the use of flash cards. There are many different kinds obtainable at the present time. Horn says, "Flash-card exercises are an essential part of the program for the improvement of silent reading. They are beneficial in five ways: First, they teach the pupil to read for the thought. Second, flash cards increase the speed of reading. Third, rapid flash-card drill decreases lip movement. Fourth, flash-card exercises increase the interest in reading. Fifth, they aid the teacher in detecting the pupils' difficulties."[3]

The present study was undertaken in an attempt to compare the degree and rate of improvement in the acquisition of silent reading ability as to both rate of reading and comprehension when the pupils were taught two different methods. One method called for definite use of flash cards in two third-grade experimental rooms and the other for the use of no flash cards in the control group but otherwise under the usual procedure, both groups working under carefully controlled directions. These directions and methods will be explained in detail. This study is the report of experimental work carried on in January and February, 1923, in the following schools in St. Louis Park, Minnesota:

Brookside School—Grade III, called Group A.
Lincoln School —Grade III, " Group B.
Fern Hill School—Grade III, " Group C.

The rate at which a pupil can perceive words, phrases, and sentences regulates his speed of reading. The eye makes a series of regular jumps along the line, pausing at intervals called the periods of fixation. The actual reading, according to Stone, takes place during these periods of fixation.[4]

Stone says regarding eye-movements that "the better readers not only make fewer

[1] This article is an extract from a Master's thesis written for the Graduate School of the University of Minnesota, under the direction and guidance of Dr. Leo J. Brueckner, College of Education, University of Minnesota.

[2] Charles H. Judd, *Reading: Its Nature and Development*, Vol. 2, No. 4, p. 5.

[3] Ernest Horn and Grace M. Shields, *Directions for Using the Horn-Shields Silent Reading Flash Card Exercises*, p. 5.

[4] Stone, *Silent and Oral Reading*, p. 8.

pauses, but the eye-movements are of more rhythmical character." The development of the proper eye-movement habit is one of the most important problems in reading instruction.

The eye-span of a pupil may cover one word or many. The problem is to increase the amount of material each child can see and comprehend at a single glance. One purpose of this experiment was to increase the reading ability of the pupils by reducing the number of fixations per line and shortening the time of each fixation. This could not be done with the material found in textbooks, but could be done with flash cards in three ways: (1) By increasing the length of the phrase on the cards; (2) by decreasing the time of exposure of the card before the pupil; (3) by increasing the difficulty of the material. A second purpose was to increase the comprehension of the reading material and to compare the improvement made by pupils under the two different methods of teaching, one with flash cards and the other without flash cards.

The following directions were given the teachers of Group A, experimental, and Group B, experimental:

The reading period during this experiment is to be exactly sixty minutes long, divided into two parts, thirty minutes for the forenoon and thirty minutes for the afternoon. Fifteen minutes of this period, both morning and afternoon, is to be given up entirely to work with flash cards. During this time every possible means should be devised to get individual pupils who are slow, listless, or lazy to speed up and make improvement in quickness of perception of the flash cards.

Directions bringing out these points should be given to the pupils. Make them see that it is a game for their pleasure and profit. Tell them that you wish them to watch closely and read all that is on each card at a single glance of the eye. On these cards are printed directions or questions to which the children are to respond immediately by doing what it says or by answering the questions.

Suggest that they must give very close attention because you intend to go faster and faster each day. Tell them that the ability to read several words at a glance will help them to read more rapidly each day. Then urge them to do better each day.

The remaining fifteen minutes of the period should be given up to regular silent and oral reading as you have been used to doing it in the past.

The teacher during this experiment should select as easy reading material as possible. She should continually urge the pupils to "read by phrases" and to "look at groups of words" and to "read everything as rapidly as possible."

Phonic and word study should be carried on as before with no change except that unknown or difficult words on the new flash cards should be included.

The control group C was taught reading in the usual manner for the same length of time each day without the use of flash cards.

At the beginning of the experiment the three groups were given the Otis Group Intelligence Scale, Monroe's Standardized Silent Reading Test I, Form I, and the Thorndike-McCall Reading Scale, Form I. The Monroe and Thorndike-McCall were repeated at ten-day intervals.

The regular work mentioned above included phonics and word drill in both groups. Library books were furnished and were easily accessible to all three groups. The teachers of the three groups were instructed to urge their pupils to do much easy reading.

To compare the mental level of the three grades and also to compare individuals in these grades, the Index of Brightness (I. B.) and the Intelligence Quotient (I. Q.) were used. In order to find these, The Otis Group Intelligence, Primary Examination Form A, was given to each pupil. The resulting median scores were:

Group A, 110 I. B.; Group B, 119.5 I. B.; and Group C, 114 I. B.

It is likely that this slight median advantage of Group B over Group C in I. Q. is not enough to interfere with the results and that for this experiment the three groups may be considered of equal mental ability so far as Otis Group Intelligence Scale can measure them, allowing for chance error in the tests and operation.

Table I should be read thus: Using the Monroe's Standardized Silent Reading Test, Test I, Form I, Group A had a median of 86 words read per minute and a comprehension score of 4. On Test I, Form II, given after a ten-day interval, the rate was 85¼ words per minute and comprehension was 5. On Test I, Form III, the rate was 104¼ words and comprehension, 7. On Test I, Form I, given after 50 days, the rate was 119, comprehension, 7.

Using Thorndike-McCall Reading Scale, Group A had a median T score on Form I of 36, with a Reading Age (R. A.) of 110, a Reading Quotient (R. Q.) of 105. Form II had a T score of 38, R. A. 116, R. Q. 108. On Form III, Group A had a T score of 37, R. A. 113 and R. Q. 105.

The medians in Table II for the three groups, A, B, and C, show some significant things. The median rate of reading on the Monroe for the three groups on the first test was the same for A and B groups, namely, 86; but for the C group it was slightly less, namely, 74¾. The comprehension for Group A was 4, for Group B, 5, and for Group C, 5. This means that the median C group pupil read less rapidly than the median A and B pupil at first, but with equal comprehension. Group A gained consistently on the three successive tests. Group B gained slightly more than

TABLE I—MEDIAN SCORES MADE ON FOUR MONROE'S SILENT READING TESTS AND THREE THORNDIKE-MCCALL TESTS

MONROE'S STANDARDIZED SILENT READING TESTS

Group	Test I—Form I		Test I—Form II		Test I—Form III		Form I—After 50 days	
	Rate	Comprehension	Rate	Comprehension	Rate	Comprehension	Rate	Comprehension
A.....	86	4	85.25	5	104.25	7	119	7
B.....	86	5	95.1	6	108.25	7	137	10
C.....	74¾	5	81	4	93.75	5	111.5	7

THORNDIKE-MCCALL READING SCALE

Group	Form I			Form II			Form III		
	T Score	Reading Age	Reading Quotient	T Score	Reading Age	Reading Quotient	T Score	Reading Age	Reading Quotient
A.....	36	110	105	38	116	108	37	113	105
B.....	36.5	111.5	110	38.5	117	114.5	38	116	111
C.....	35.5	108.5	105	34.5	105.5	99.5	36	110.5	105

Group A in both rate and comprehension. Group C gained less in rate and none at all in comprehension. After 50 days Groups A, B, and C show good gains in rate compared to that in Test III. Groups B and C also show gains after 50 days in comprehension, compared with Test III. But Group A made no gain in comprehension after 50 days as compared with Test III.

On the Thorndike-McCall Reading Scale the median T scores were approximately equal in the first test. Then Group A gained two points in Test II. Group B gained two points in Test II. Group C lost one point in Test II. On the third test Group A gained one point in T score over Test I. Group B gained 1.5 points and Group C gained five-tenths of a point. This means that Group A gained, in 20 days, three months in Reading Age; Group B gained 4.5 months; and Group C gained two months in Reading Age. At the same time the median Reading Quotients for Group A and Group C remained the same, namely, 105. B made a gain of one point in Reading Quotient in the third test compared with the first. Perhaps the reason for the very much larger gains on the Monroe Silent Reading Test as compared with the Thorndike-McCall Test is because the Thorndike-McCall is a scale and measures general ability in reading, while Monroe's Standardized Silent Reading Test is a narrow measure of two abilities in reading, namely, speed and comprehension. Table II contains the median gains made by the three groups. This table shows the comparison of the gains made by the A and B groups as against those of the C group. It seems to point to the fact that flash cards did affect the results and

TABLE II—MEDIAN GAINS FOR THE THREE GROUPS USING MONROE'S SILENT READING TESTS AND THORNDIKE-MCCALL READING SCALES

MONROE'S STANDARDIZED SILENT READING TESTS

Group	Gain—10 days		% Gain—10 days		Gain—20 days		% Gain—20 days		Gain—50 days		% Gain—50 days	
	Rate	Comp.	Rate	Comp.	Rate	Comp.	Rate	Comp.	Rate	Comp.	Rate	Comp.
A.....	9.5	1	11.8	40	22.75	3	21.2	75	33	3	38.4	75
B.....	− 2.5	1.5	1.5	27.5	15	2	−19.1	50	51	5	59.3	100
C.....	−14.2	−1	−13.9	−16.7	−7	0	− 8	0	36.75	2	49.1	40

THORNDIKE—MCCALL READING SCALES

Group	Gain—10 days		% Gain—10 days		Gain—20 days		% Gain—20 days	
	R. A.	R. Q.	R. A.	R. Q.	R. A.	R. Q.	R. A.	R. Q.
A.....	6	5	5.4	5.4	6	6	5.4	5.4
B.....	5.5	5	6.3	6.9	4	4	4.2	4.6
C.....	−3	−3	−2.9	−2.8	0	0	0	0

cause greater gains in reading ability for the experimental groups than for the control group.

Table II is to be read thus: Group A, using Monroe's Standardized Silent Reading Tests, gained in 10 days a median of 9.5 words in rate and one point in comprehension. Using the scores for the first test as a basis, they gained 11.8% of the rate of the first test in 10 days and 40% in comprehension. In 20 days they gained 22.75 words in rate and three in comprehension, or a percent gain of 21.2 in rate and a percent gain of 75 in comprehension. Fifty days after the test closed, they gained 33 words in rate and 3 points in comprehension, or a percent gain of 38.4 in rate and a percent gain of 75 in comprehension.

From Table II it is very easy to compare the median gains made by the two experimental groups A and B with the median gain made by Group C, the control group, in both tests.

In considering the Monroe Standardized Silent Reading Test, Group B did not make as rapid a start as Group A, but they almost equaled the score of this group at the close of the experiment, that is to say, after 20 days, and were far superior 50 days afterward, showing that they retained the ability better and even improved somewhat. They were a larger class than A, Group B having an enrollment of 24 and A, 13. It will be remembered that Group A was in the same room with a fourth-grade class of pupils.

The median Index of Brightness for Group A is 110, Group B, 119.5, and Group C, 114. Group B has a slightly higher median I. B., but it is doubtful whether this explains the higher median retention of ability after 20 days.

Group C shows up very poorly in this table, having a minus median gain in both rate and comprehension at the end of 10 days. The C group also shows a minus gain after 20 days. Group A and Group B gained approximately an average of 20% in rate and 67½% in comprehension, in the same time. After 50 days, Group C shows a gain of 36.75 in rate and 2 in comprehension or a percent gain of 49.1 in rate and a percent gain of 40 in comprehension. This compares very favorably with Groups A and B. The gains of Groups A and B compared with C in the 20 days of testing tend to prove that the single variable, namely, the flash cards, increased the rate and comprehension of reading material of Groups A and B as compared with Group C.

Using the Thorndike-McCall Reading Scale, in 10 days Group A gained six months in Reading Age and gained five points in Reading Quotient, making a percent gain of R. A., 5.4 and R. Q., 5.4. In 20 days they gained six months in Reading Age and six points in Reading Quotient, making a percent gain of 5.4 in Reading Age and 5.4 in Reading Quotient. Group B on the same test gained 5.5 months in Reading Age in 10 days and five points in Reading Quotient, making a percent gain of R. A., 6.3 and R. Q., 6.9. In 20 days B gained four months in Reading Age and four points in Reading Quotient. In other words, they lost 1.5 months in Reading Age, comparing Tests I and II. Group C lost three months in Reading Age after 10 days, but showed a zero gain in Test II at the end of 20 days. The A and B Groups, therefore, gained six months and four months respectively, while the C Group made a zero gain in the 20 days of the test. This is a significant gain for the experimental classes using flash cards when compared with the control group taught under ordinary methods.

The correlation between the Intelligence Quotients and the gain in comprehension for Monroe's Standardized Silent Reading Test Revised, Test I, Form III, over Test I,

Form I, was found for the three groups A, B, and C. The formula used was the product moment. The results were as follows:

r Group A = −.0052
r Group B = −.068
r Group C = −.175

The correlations were in all three cases practically zero. This shows that there was no relation between mental ability and ability to improve in comprehension for the pupils in these classes. The mentality of these pupils ranged between 127, Intelligence Quotient for the brightest, and 88, Intelligence Quotient for the dullest, as measured by Otis Intelligence Scale, Primary Examination, Form A.

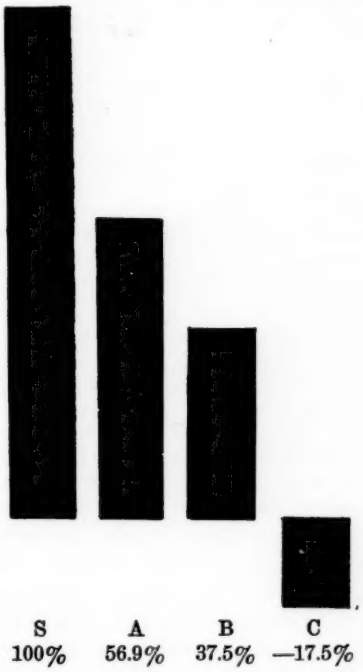
Graphs I, II, and III made from Table II compare the median gains made by the A, B, and C groups with the standard gains as shown by Monroe and Thorndike in their manuals on the tests. Graph I compares the median gain in rate of reading for the three groups with Monroe's standard gain for one year. This shows a decided advantage for the two experimental groups, A and B, over the control group C.

Graph II is still more convincing. It shows the gain in comprehension made by the three groups compared with the standard. Group A had a median gain for the grade of 7.7% of a year's work, or the equivalent of 6.93 months figured on the basis of nine months to the school year. Group B had a gain of half a year, while C stood at the same point when they finished as when they began. This gain of A and B groups over C group was also made in the face of the fact that C group was receiving instruction in reading in the regular way, while A and B groups were having flash-card drill for fifteen minutes twice a day.

For Graph I, the standard gain in rate of reading for one year as given by Monroe was used. This standard for Grade III is 82 words per minute for Form I. For Grade IV, it is 122 words per minute. The difference between these two scores is 40 words, or the standard gain in rate expected for one year's work. Group A made a gain of 22.75 words in 20 days, Group B a gain of 15 words, and Group C lost seven words. This may be shown as follows (see also Graph I):

	Words	*%*
Standard gain expected in one year	40	100
Group A gained in 20 days...	22.75	56.9
Group B gained in 20 days....	15	37.5
Group C lost in 20 days.....	−7	−17.5

GRAPH I—MEDIAN GAIN IN RATE FOR GROUPS A, B, AND C FOR 20 DAYS OF EXPERIMENT COMPARED WITH STANDARD GAIN FOR ONE YEAR IN MONROE'S STANDARDIZED SILENT READING TEST



This graph is to be read thus: the first column represents the gain in rate of reading expected for an average fourth-grade pupil over a third-grade pupil, or the standard average gain for one year. Column A represents the gain, 56.9%, actually made by the median child in experimental Group A in 20 days. Group B gained 37.5% and control Group C lost 17.5% in reading rate as shown by Monroe's Standardized Silent Reading Test I.

Graph I shows a definite improvement of more than a half year in rate of reading for the A Group using flash cards. Group B made a gain equivalent to 37.5% of a year, or 3.3 months, when figured on a basis of a nine-months school year. Group C, which was taught reading in the ordinary manner, showed a loss of 1.5 months for the 20 days as measured by Monroe's Standardized Silent Reading Test.

Graph II compares the median gains in comprehension for the three groups measured by Monroe's Standardized Silent Reading Test. The standard in comprehension for Grade III is 3.8. For Grade IV it is 7.7. This is a difference of 3.9 as the gain for one year. This may be illustrated as follows:

Standard gain in Comprehension expected for 1 year, 3.9 or 100%.
Group A gain in Comprehension expected for 20 days, 3 or 77%.
Group B gain in Comprehension expected for 20 days, 2 or 51.3%.
Group C gain in Comprehension expected for 20 days, 0 or 0%.

This comparison is shown in Graph II, which is to be read as follows: the first column represents the gain expected for an average fourth-grade pupil to make over a third-grade pupil, or the standard average gain for one year. Column A represents the gain actually made by the median child in experimental Group A in 20 days, or

GRAPH II—MEDIAN GAIN IN COMPREHENSION FOR GROUPS A, B, AND C FOR 20 DAYS OF EXPERIMENT AS COMPARED WITH STANDARD GAIN FOR ONE YEAR IN MONROE'S STANDARDIZED SILENT READING TEST

77%. Group B made a gain equal to 51.3% and control Group C failed to gain. This means a gain in 20 days equivalent to 6.93 months of work for Group A, and 4.6 months for Group B, whereas Group C under ordinary methods of teaching reading gained nothing in comprehension as measured by Monroe's Standardized Silent Reading Test. This shows that, for the three grades tested, the flash cards were an advantage in making gains in comprehension. These gains were also made in the short time of 20 days.

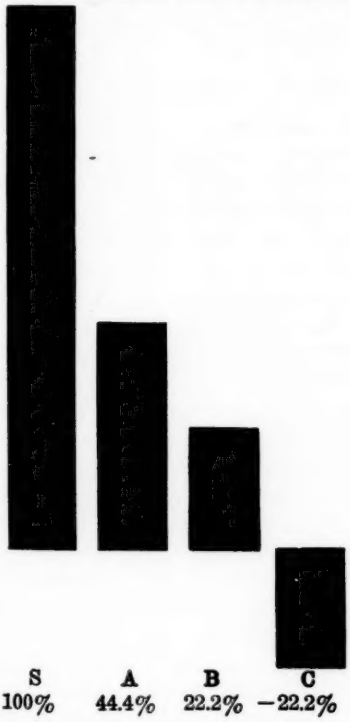
Graph III compares the median gains made in T score on the Thorndike-McCall Reading Scale for the three groups to the standard gain expected for one year. The standard for the high third grade is Mean Normal 37.3; for high fourth, Mean Normal 41.8. This is a difference of 4.5, T

score, or the standard gain for one year. This may be shown as follows:

Standard gain in T Score for one year, 4.5 or 100%.
Group A gain in T Score for 20 days, 2 or 44.4%.
Group B gain in T Score for 20 days, 1 or 22.2%.
Group C gain in T Score for 20 days, −1 or −22.2%.

This is illustrated in Graph III.

GRAPH III—MEDIAN GAIN IN T SCORE ON THE THORNDIKE-MCCALL READING SCALE FOR GROUPS A, B, AND C FOR 20 DAYS AS COMPARED WITH THE STANDARD GAIN FOR ONE YEAR



This shows that Group A gained nearly a half year in reading ability when compared with the standard gain for one year as given by Thorndike-McCall Reading Scale. Group B gained nearly a quarter of a year, while Group C lost nearly a quarter of a year. If one compares the gain of Groups A and B with Group C, then Group A gained in ability an amount equal to almost three-quarters of a year and Group B gained half a year.

This leads to another statement as to why Group C lost during the 20 days' experiment while using Thorndike-McCall Reading Scales, namely, that the nature of the test does not seem to be constructed to measure small improvements in rate accurately because the steps in the scale are too great. Moreover, the three forms of the tests used seem to vary in difficulty. However, this only tends to show that, since the experimental groups made good gains, flash cards were a very efficient means of improving reading in so far as the Thorndike-McCall scale measures reading.

In order to discover if there was any difference in the degree of retention and to compare the total improvement for the two classes using flash cards with the control group which did not use them, after 50 days had elapsed, Monroe's Standardized Silent Reading Test I, Form I, was repeated. Seventy school days had passed since these pupils had seen Form I, and even if they remembered any of it, which is not probable, the conditions would be the same for both groups of pupils.

Table III contains the summary of these tests.

TABLE III—COMPARISON OF THE MEDIAN GAINS FOR 70 DAYS FROM THE BEGINNING OF THE EXPERIMENT TO 50 DAYS AFTER MONROE'S SILENT READING TEST

Group	Gain in Rate	Gain in Comprehension
A.....	35.5	3
B.....	49.75	4
C.....	12.5	2

This table is to be read thus: in 70 days, including the 20 days of the experiment and the 50 days after the experiment, Group A made a median gain of 35.5 words read per minute and a gain of three points in comprehension.

The median shows that the Groups A and B made much better gains in comparison with Group C in both rate and comprehension for the 70-day period. Group A gained nearly three times as much as Group C in rate. Group B gained nearly four times as much as Group C in rate.

In comprehension, Group A gained three points, Group B gained four points, and Group C gained two points. In other words, Group B gained twice as much as Group C and Group A gained 1½ times as much as the C Group pupils during the 70 days. This is very important. It leads to the belief that flash cards were a means of improving comprehension in these two experimental groups and that the greater improvement made by Group A and by Group B as compared with Group C was due to flash-card drill.

Table IV shows that Group C gained the most after the experiment closed.

TABLE IV—COMPARISON OF THE MEDIAN GAIN AFTER 50 DAYS FOR GROUPS A, B, AND C ON MONROE'S STANDARDIZED SILENT READING TEST

Group	Gain in Rate	Gain in Comprehension
A.....	14.75	0
B.....	28.25	2
C.....	30.25	2

The above table is to be read thus: After the experiment closed, Group A in 50 days made a median gain of 14.75 words and 0% gain in comprehension, when compared with the scores of Monroe's Standardized Silent Reading Test I, Form III.

The explanation for the wide difference in the three groups in Table IV, and especially for the fact that Group C gained more than twice as much as Group A, and slightly more than Group B during the 50 days after the experiment closed, is at least in part due to the following:

1. That after the experiment closed, Groups A and B may have relaxed a little.
2. This would not be true of the control Group C, for their work had at no time been speeded up.
3. The experimental groups had made such gains during the experiment that they had more nearly reached their mental capacity and therefore gains in the future would be harder to make.

CONCLUSIONS

This experiment was conducted for the purpose of comparing the improvement made by third-grade pupils in the gaining of silent reading ability in a given length of time. Two methods were used, one a definite use of flash cards in the two third-grade rooms, Groups A and B, and the other the usual method of teaching reading, but using no flash cards, in the control room, Group C.

The study has resulted in the improvement of the teaching of reading in the school system where the study was made. The teachers saw very clearly the benefits derived from the use of flash cards. They began to read books and articles on the new methods of teaching, especially reading. The effect was noted elsewhere, as in history, geography, and arithmetic. The teachers asked for and obtained a complete set of flash cards for use in each building.

This study has been a great aid in the supervision of elementary school work, another benefit which is worth mentioning. There are weaknesses in this study, since it was difficult to control all the variables. But the study was made in order to note the amount of progress and improvement

that could be accomplished under ordinary schoolroom conditions as they are found in the average small school system. As has been previously explained, there was only one variable, namely, flash cards were used in the A and B experimental groups, but they were not used in the control group.

It is true that there were other factors which would have a bearing upon the results but which could not be entirely controlled. Three different teachers conducted the experiment in their own grades. They were carefully supervised by the writer. The plans and program were given each of them in writing. The method of flashing the cards was supervised and the teachers were taught to flash the cards quickly. An ideal experiment of this kind would be to have pupil groups exactly equal in ability, taught by the same teacher, part of them taught with flash cards and part without flash cards. This was impossible in our school as the buildings are some distance apart and the teacher was not available who could move from one third grade to another. Such a procedure would not be measuring the improvements under regular classroom conditions as was desired.

A second weakness is the inability to control or measure the outside reading of the pupils. No attempt was made to do this. All the pupils in the control and experimental groups had library books in the rooms which they could read. No doubt some of the improvement of both groups in speed and comprehension was due to the outside reading.

A third factor would be the reliability of the tests and scales used. But all of these were used in comparing the experimental groups with the control group, so the reliability is not an important feature.

Another possible weakness noted is the fact that the classes were not of equal size. Group A had thirteen third-grade pupils. In the same room were fourteen fourth-grade pupils. Group B had twenty-four pupils all in the third grade. Group C had nineteen third-grade pupils in the same room with eighteen fourth-grade pupils, under the direction of the same teacher.

It is also possible that there were individual differences in the efforts made by the pupils. There were no doubt other variables not mentioned here which had some bearing upon the experiment. But when gains that were made by the experimental groups are compared with those of the control group, the results indicate that the flash-card training raised their general reading ability somewhat, and that it raised very appreciably their rate of reading and their comprehension of material, like that in Monroe's Standardized Silent Reading Tests.

A median gain in rate, using the Monroe Standardized Silent Reading Test, of 22¾ words per minute was made by the A experimental group in 20 days. The rate of reading for the control group decreased 7 words in the 20 days. This was a gain for Group A of 56.9%, using the score for Monroe's Test I as a basis. Group C made a median gain of −17.5% on the same test.

A median gain of three points in comprehension was made by A experimental group, while the C or control group gained 0 in comprehension. Group A's gain of three points is equivalent to 77% of a year's gain for the 20 days, or a gain of 6.93 months for the A Group, using Monroe's Standardized Silent Reading Test. In rate, Group B made a median gain of 15 words per minute using Monroe's Standardized Silent Reading Test. Group C lost seven words. In comprehension, Group B made a median gain of two points. Group C made a median gain of 0 points. Group B's gain is equivalent

to 51.3% of a year's gain made in 20 days, or a gain of 4.5 months.

Using Thorndike-McCall Reading Scales, Group A gained two in T score, Group B gained one in T score, while Group C decreased one in T score. The standard gain in T score for one year is 4.5. This means that A group gained 44.4% of a year in 20 days. Group B gained 22.2% of a year in the same time and Group C lost 22.2% of a year. This shows that the A group pupils gained nearly a half year in general reading ability in only 20 days as measured by the Thorndike-McCall Reading Scales. Group B gained nearly a quarter of a year in the 20 days, while Group C lost nearly a quarter of a year in the same time. The reason Group C lost 22.2% is probably due to the nature of the Thorndike-McCall Reading Scales. They consist of paragraphs of increasing difficulty. This shows that the experimental groups were gaining in general reading ability, which would indicate that the flash cards did raise the general reading ability for the two experimental groups somewhat.

Fifty days after the experiment closed, the B experimental group was still showing a better improvement than the C group. Group A was gaining less rapidly than Group C. This may have been due to the fact that the experimental groups had more nearly reached the limit of their ability to improve their speed and comprehension for their age and intelligence. Since the A group gained less rapidly than the C group or control group after the experiment closed, it cannot be claimed that the flash-card groups retained their ability to improve any better than the control group.

The individual charts were a means of keeping up interest and stimulating improvement. As the cards increased in number and difficulty, the exact perception of them became more difficult. The percentages of perception in all the pupils' scores were irregular. Many of them showed definite improvement during the experiment.

In comparing the improvement made by dull pupils with that made by bright pupils of the same group, there appeared to be no advantage for either. There was a negative correlation between the gains in comprehension on the Monroe Test and in the Intelligence Quotient for each pupil as found by the Otis' Group Intelligence Scales. There is not enough range of ability here, nor are there enough cases to say that the dull improve as much as the bright when taught with flash cards. But for these pupils with an Intelligence Quotient range from 127 to 88, the brightest pupils did not have the advantage in gains made. However, at all levels of intelligence the pupils of the experimental groups exceeded in growth the pupils of the control group.

Individuals of equal age and intelligence, as measured by the Intelligence Quotient, were matched for purposes of comparison. This matching brought out more clearly the fact that the pupils of the same age and intelligence in the experimental groups made better gains than pupils from the control group.

In this experiment the boys of the control group excelled the girls. The girls excelled the boys in the experimental groups, where flash cards were used. There appeared to be no way of checking this to see why such was the case.

These results from the third grades in this experiment seem to show that flash cards were a good means of gaining rate and comprehension in silent reading for these classes. It is perhaps not going too far to say that third grades of similar types might secure improvement in a short space of time with definite use of the flash cards.

AN ATTEMPT TO IMPROVE APPRECIATION TECHNIQUE

GEORGINA LOMMEN

Director of the Training School, State Teachers College, Moorhead, Minnesota

The Training Department staff of our State Teachers College had a growing conviction that the technique relating to the development of appreciation, whether of art, music, or literature, was of all techniques the most difficult to establish. In an effort to analyze and remedy the difficulty and to secure if possible a greater degree of uniformity and confidence among the faculties in the matter of aims, procedures, and desirable outcomes in this particular field of instruction, this brief study was undertaken.

Eight senior students eager to grow in the art of English instruction accepted the responsibility of definitely setting about the task of improving their appreciation technique by way of this experimental route. The faculty personnel of the study group consisted of the President, five members of the Education Department, four members of the English Department, the Director of Training, four division critics, and three classroom teachers—in all a group of sixteen.

The student teachers spent several preliminary periods with the director of the experiment in characterizing the specific functions of reading *per se* with those of literature *per se*. This discussion was followed by a period for setting up the principles underlying the procedure and the desirable outcomes in each of these curriculum activities.

The group experienced several very real problems in the selection of their material: seasonableness, simplicity, wide appeal, adaptability for children ranging from eleven to fifteen years of age; the same material was to be employed for all grades from five to eleven to make ready comparisons easier. Whittier's poems, "The Huskers" and "The Corn Song," were finally selected for the lessons to be taught; the development of one group of lessons in the series will be sufficient to illustrate the nature and outcome of the study.

The student group also spent a period in discussing such principles as underlie the teaching of an appreciation exercise. These principles were of a general rather than a specific nature, and were summarized from readings from Strayer and Norsworthy's *How to Teach,* Holley's *Technique of Teaching,* Mossman's *Changing Conceptions Relative to the Planning of Lessons.*

Each student equipped with such general knowledge and enthusiasm as the preliminary discussions had afforded presented lesson plans for the teaching of each poem to her particular grade The plans were numbered, not named, and were marked by the sixteen instructors with regard to (1) specific aims, (2) the appeal of the major procedure, (3) the desired outcomes. Those papers possessing qualities of excellence were to be graded ×, those carrying some good and acceptable features were to be marked +, and those lacking in the desired qualities were to be marked −. The table of gradings reveals several problems.

I. As a faculty group responsible for determining the principles of approach to and the achievement of appreciation technique, we differed in personal standards from − to × on the same plan.

II. Members of the same department differed as widely as did the individuals in

READING	LITERATURE

Aims

General:	*General:*
To give children mastery of the mechanics of reading.	To give the learner immediate satisfying experiences with reading and listening to reading.
Specific:	*Specific:*
To develop the power of comprehension of thought.	According to Hosic:
To aid children in ability to give thoughts to others through oral reading.	To help the child enjoy literature for its own sake.
To develop the power of recall and reproduction.	To provide emotional experience.
To develop skill in the intelligent use of books.	To provide vicarious experience.
To arouse in the children a permanent interest in reading.	According to MacClintock:
	To allow and meet appropriately the child's native and instinctive interests and tastes.
	To cultivate and direct these tastes.
	To awaken in the child new and missing interests and tastes.

Method

Characteristics:	*Characteristics:*
Child is stimulated to an active, curious, studious state of response.	Child may be passive, induced only to participate and derive such concomitant values as may inhere in artistic material or in the appreciative reading or telling.
In the lower grades the drill method is employed to secure the development of skills.	Primarily the method is concerned with finding pleasure in a book.
In the intermediate grades much experience is provided in silent reading.	Often the activity consists only of listening to another read from a book.
Teacher directs and guides.	Repeated readings of much enjoyed selections is one of the tests of successful teaching.
Specific assignments are made to secure problem solution.	Adventuring into new fields in bookland becomes a habit.

Desired Outcomes

Immediate:	*Immediate:*
The development of special reading skills: comprehension, rate, recall, reproduction.	Joy in getting the feeling of the writer in present reading or listening experiences.
More remote:	*More remote:*
Growing interest in a variety of reading.	A wiser use of leisure time through creation of new reading interests.
Ability to use books widely.	Abiding and growing interests in fine reading.
Ability to reproduce and use knowledge gained through reading in new situations.	The acquisition of tastes, standards, attitudes and ideals through broader reading experiences; culture.
Control of factual materials for problem solution.	

COMPARATIVE RATING OF LESSON PLANS MARKED BY SIXTEEN FACULTY MEMBERS

Markers	Plans							
	1	2	3	4	5	6	7	8
1	−	+	−	−	+	+	−	+
2 Education	+	+	+	−	−	−	−	+
3 Department	+	+	+	−	−	−	−	+
4	+	−	−	+	−	+	−	×
5	+	×	−	×	−	×	−	−
6 President	−	×	+	+	+	+	−	+
7 English	+	−	−	+	−	−	−	−
8 Department	+	+	+	+	+	+	−	+
9	×	×	+	+	−	+	−	×
10	×	+	+	×	+	−	−	×
11	×	+	+	×	×	−	−	×
12 Department	+	+	−	+	−	+	−	×
13 Supervisors	−	+	+	+	−	+	−	×
14	×	+	−	+	+	−	−	×
15	+	+	−	+	−	+	−	+
16 Director	×	−	−	+	+	−	−	×

the whole group; that is to say, there was as little agreement among the members of the English Department on the quality of a single plan as there was among the members of the Education Department.

III. Clearly, in our ability to judge from common standards relating to aims, procedures, and outcomes in the teaching of a poem to children, we were, as the old woman said when she saw her son's regiment marching, "all out of step but Jim!" We were an unstandardized group of instructors in matters of agreement as to what constitutes acceptable procedure in teaching poetry at least. In rating the actual execution of the plans during the class period, there was a corresponding disagreement as to what constitutes ×, +, or − quality in instruction, though the number of instructors marking the actual teaching was smaller than the group grading the plans.

In the effort to arrive at a basis for a more common judgment, the faculty group discussed and accepted the outline (page 114) as a scaffold upon which to build a more acceptable and uniform procedure.

As a basis for discussion of what constitutes acceptable procedure in the study of poetry, the faculty group discussed the rankings given by 131 markers to the sample assignments on Bryant's "To a Waterfowl," submitted by Doctor Hosic in his *Empirical Studies*, page 81. There was some positive disagreement among the members of the group as to the final rankings given by the frequency placement of the markers in Hosic's study, but in general the group agreed that we should proceed with the following positive principles as a concrete basis upon which to build appreciation techniques for study of literary materials in the grades.

1. Attempt to build up a sympathetic approach; introduce biographical detail and critical estimates after rather than before the poem itself is presented.
2. Present the unit as a whole in the first presentation.
3. Build up mental pictures: imagery of scenes, sounds, characters, qualities.
4. Realize in imagination the experience embodied in the unit.
5. Seek to gather the connotation of words and phrases.
6. Interpret the whole in the light of one's own recollection.
7. Regard the selection as an organic whole.
8. Questions calling for comparisons and for preferences are legitimate.
9. Teacher's appreciative attitude contagious.
10. Appreciation is dependent upon familiarity and repeated readings.
11. Make possible creative returns from the listeners.

THE HUSKERS[1]

It was late in mild October, and the long autumnal rain
Had left the summer harvest-fields all green with grass again;

[1] For the convenience of the reader, the poem utilized as content for the first lesson is inserted.

The first sharp frost had fallen, leaving all
the woodlands gay
With the hues of summer's rainbow, or the
meadow-flowers of May.

Through a thin, dry mist, that morning, the
sun rose broad and red,
At first a rayless disk of fire, he brightened
as he sped;
Yet, even his noontide glory fell chastened
and subdued,
On the cornfields and the orchards and softly
pictured wood.

And all that quiet afternoon, slow sloping to
the night,
He wove with golden shuttle the haze with
yellow light;
Slanting through the painted beeches, he
glorified the hill;
And, beneath it, pond and meadow lay brighter,
greener still.

And shouting boys in woodland haunts caught
glimpses of that sky,
Flecked by the many-tinted leaves, and laughed,
they knew not why;
And school girls, gay with aster-flowers, beside
the meadow brooks,
Mingled the glow of autumn with the sunshine
of sweet looks.

From spire and barn looked westerly the
patient weathercocks;
But even the birches on the hill stood motion-
less as rocks.
No sound was in the woodlands, save the
squirrel's dropping shell,
And the yellow leaves among the boughs, low
rustling as they fell.

The summer grains were harvested; the stubble-
fields lay dry,
Where June winds rolled, in light and shade,
the pale green waves of rye;
But still, on gentle hill-slopes, in valleys
fringed with wood,
Ungathered, bleaching in the sun, the heavy
corn crop stood.

Bent low, by autumn's wind and rain, through
husks that, dry and sere,
Unfolded from their ripened charge, shone out
the yellow ear;
Beneath, the turnip lay concealed, in many a
verdant fold,
And glistened in the slanting light the
pumpkin's sphere of gold.

There wrought the busy harvesters; and many
a creaking wain
Bore slowly to the long barn-floor its load of
husk and grain;
Till broad and red, as when he rose, the sun
sank down, at last,
And like a merry guest's farewell, the day in
brightness passed.

And lo! as through the western pines, on
meadow, stream, and pond,
Flamed the red radiance of a sky, set all afire
beyond,
Slowly o'er the eastern sea-bluffs a milder glory
shone,
And the sunset and the moonrise were mingled
into one!

As thus into the quiet night the twilight lapsed
away,
And deeper in the brightening moon the tran-
quil shadows lay;
From many a brown old farm-house, the hamlet
without name,
Their milking and their home tasks done, the
merry huskers came.

Swung o'er the heaped-up harvest, from pitch-
forks in the mow,
Shone dimly down the lanterns on the pleasant
scene below;
The growing pile of husks behind, the golden
ears before,
And laughing eyes and busy hands and brown
cheeks glimmering o'er.

Half hidden in a quiet nook, serene of look
and heart,
Talking their old times over, the old men sat
apart;

While up and down the unhusked pile, or nestling in its shade,
At hide-and-seek, with laugh and shout, the happy children played.

Urged by the good host's daughter, a maiden young and fair,
Lifting to light her sweet blue eyes and pride of soft brown hair,
The master of the village school, sleek of hair and smooth of tongue
To the quaint tune of some old psalm, a husking-ballad sung.

The teaching aims, procedures, and suggested outcomes as set forth by the lesson plans were summarized, discussed, and rated by the faculty group as follows:

Aims

1. To show the children the beauty of this poem; to develop a feeling of appreciation for autumn; to create a sincere liking for poetry.

The first element in this threefold aim was an × purpose, but the addition of the second and third elements made the aim remotely possible of achievement.

2. To stir in pupils an appreciation for poetry in general through showing beauty in Whittier's poem, "The Huskers." (+)

A + aim, but too remote for immediate achievement.

3. To develop in pupils an appreciation and feeling for the poem. (×)

This aim was acceptable as immediately attainable and of × quality.

4. To present poem in such a way that the children will learn to like good poetry. (+)

A worthy aim but general rather than specific and impossible of achievement in one lesson or in one grade.

5. To enjoy the poem and discover Whittier's reasons for liking October. (+)

This aim involves a factual element that reduces it from an × plane to a + plane.

6. To teach the pupils the poem of "The Huskers" by Whittier so that they will appreciate it. (+)

This aim lacks the lightness and delicacy so essential to the treatment of poetry.

7. To rouse an appreciation for autumn in children and to help children learn about the harvesting of the last crop by means of a husking bee. (−)

It will readily be seen that the factual aspects of this aim were responsible for the unanimous rating of plan number seven as −.

8. To acquaint children with a poet's artistic description of an autumn day and to assist the children to a new and enjoyable experience in poetry through listening to the teacher's appreciative reading.

This is an × aim.

Procedures

1. Ask class if they have ever heard about John G. Whittier; get from them what they know and add something to their fund of knowledge about his life and his work. (+)
2. Get children to state their preferences for seasons. Show autumn pictures and call attention to different opportunities of city and country folk for enjoying autumn. (+)
   Stanza 1 —Shut your eyes and get main picture. (×)
   " 2–3 —Shut your eyes and see how the sun looked as it rose on the landscape. (×)
   " 4 —What effect did autumn have on the children? (−)
   " 5 —What sounds can you hear? (×)
   " 6–7 —Get poet's pictures of cornfield. (×)

Stanza 9 —What did farmers accomlish during the day? (−)

" 10–11—When do "bees" take place? (−)

" 12 —What other things take place? (−)

3. How many can draw one picture from the poem? Bring it to class to-morrow. (+)
4. I am going to let John G. Whittier tell us why he loves October and why it is the most beautiful month. (×)

Interest children in other poems written by Whittier through use of volumes containing his poems. (×)

5. Some poets have expressed autumn pictures very well; I will read one. Do these pictures apply to autumn in our state? (×)

Do you like this poem? (−)

Read the description from this poem of a picture you have actually seen. (×)

Read description you like best. (×)

Do you think these people enjoyed autumn? (+)

Is there a part of the poem you would like to remember? (×)

There are several collections of Whittier's poems in the library which I think you would enjoy. (+)

6. In years past each section of our country had some particular form of amusement in which all could take part—they did what man has always been trying to do: combine work and play in "Bees." In New England, husking bees were common. I have a beautiful poem in which Whittier tries to give us a description of an autumn day and a husking bee. (×)
7. We have learned to like three poems about autumn in the last two weeks. Let us pick out some things described in these poems. (+)

Describe cornfields in a line of poetry. (+)

Would you like to read a poem about the corn and cornfields? (−)

What are stubble fields? (−)

How do farmers harvest the corn? (−)

Do you know what a husking bee is? (−)

Have you ever jumped on corn shocks? (−)

Have you enjoyed this poem as well as our other three poems? (−)

What is the meaning of these lines: "He wove with golden shuttle—"? (−)

What feeling do you have walking through the woods? (−)

When do we harvest the corn crop? (−)

What pictures do you get from the 8th, 9th, and 10th stanzas? (−)

8. The poet attempts to give a beautiful picture of an October day from morning to night. Read poem as a whole. (×)

I feel that this poem is divided into several big ideas; as I read will you try to name those ideas. (×)

Stanzas 1–2—An October morning.

" 3–5—An October afternoon.

" 6–7–8—A day in a New England cornfield.

" 9—An October sunset—close of day.

" 10–13—Merry-making in the barn. —The Husking Bee. (+)

Call for volunteer readings of individual choices of best pictures. (×)

Do you think Whittier chose a good name for this poem? (+)

Desired Outcomes

1. How many of you would like to draw one of the pictures from the poem and bring to class to-morrow? (+)
2. Do you like this poem? Why? (−)
3. Would you enjoy reading other poems written by John G. Whittier? I will leave these books on the table for you. (+)
4. Who will read the poem for us so that we may see the pictures of the poem more vividly? (+)
5. Would you like to read some of his other poems? Books in library suggested by teacher. (+)
6. Have you enjoyed this poem as much as other poems studied in our English class? (−)
7. Shall we read more poems in class? (−)

8. To see one or more of the group following up the lesson in one of these ways would repay me for my effort:
   a. Discussing the poet's motive in this poem. (×)
   b. Re-reading the poem without teacher's suggestion. (×)
   c. Finding other beautiful autumn poems. (×)
   d. Making further acquaintance with Whittier. (×)
   e. Requesting a repetition of poem at some review period. (×)
   f. Memorizing the best loved stanzas. (×)
   g. Informal discussion of comparative worth of stanzas or units, the poet's realization of his title, or the biography of the poet. (×)

The student group marked the individual plans in the light of the application of the "positive principles"; comparisons were made with the faculty ratings; a feeling of eager curiosity and coöperation pervaded the study, and it is safe to say that the little experiment brought rich returns in development of more common individual standards and a group consciousness of what constitutes appreciation technique.

ORGANIZATION AND SUPERVISION OF EXTRA-CURRICULAR ACTIVITIES[1]

FRANKLIN P. HAWKES
Principal, Junior High School West, Arlington, Massachusetts

A question that often comes from a parent to the principal of a school is the following: "What is the use of all this English my child is getting? I do not blame her for failing in it!" To answer this question it is necessary often to show the uses of the subject in question out in the world. Yet what a commentary that is upon our education if we are unable to provide in our school system the necessary activities that will show the use of the principles being learned! It is to this end that leading administrators have introduced the extra-curricular activities into the school life; thus do they give to the child the opportunity to practice what he is learning.

An excerpt from Smith's *Constructive School Discipline* is interesting here:

It is abundantly worth while, therefore, to face the problem of utilizing extra-curricular activities to the best educational advantage. At present they furnish the most *effective* training the schools are giving in social and moral adjustment. They are group enterprises in which pupil initiative and management are more conspicuous than in classroom, study hall, and laboratory exercises. Participation is more voluntary and selective, each pupil following his own taste, ability, and need. By virtue of these qualities they are likely to stimulate a wholehearted effort and a sacrificial spirit not easy to obtain in formal school work. They give practice in adapting means to ends and personality to personality under conditions of reality; they tend to eliminate individual idiosyncrasies and petty selfishness through the force of social pressure; to refine crudities of speech and manner by social attrition; exercise alternate leadership and followerships, the

[1] The second of a series of three articles on Supervision. The first appeared in the September number of this JOURNAL.

pupil leading in one activity being necessarily a follower in many others; promote self-control under crowd excitement; foster democracy, and racial, religious, and social tolerance through enforced intimacy of contact under conditions dominated by ability in performance; build up self-confidence, aggressiveness, and avocational tastes, capacities, and habits. Altogether they provide a human nature and social conduct laboratory of vital significance to the educative process. It should scarcely be a matter of wonder, then, that many employers of school graduates, looking for executive ability and capacity for growth, are more interested in the student's extra-curricular life than in his classroom grades!

Since this was the point of view of educators, it seemed advisable to introduce into our school a number of these extra-curricular activities. Practically the first that seem to appear are athletics, orchestra and school paper activities. To issue a call in the autumn for candidates for a football team, or for a girls' field hockey or soccer team, is to find plenty of material available and eager for action. To give those who are taking music lessons the opportunity to combine practice with the pleasure of playing in assemblies for their school is welcomed with a splendid response. To give to the academically inclined an opportunity to develop their mental ability by writing for a school paper is to reach another class of pupils.

Though these are the first that come to mind, there are others which furnish the same incentive: clubs during school hours, student participation in school management, home room organizations, class meetings, Junior Safety Council, assembly exercises, Athletic Association, Boy and Girl Scouts, home nursing courses—all these are opportunities to practice the curricular work and principles. They all require organization in the first place, and supervision after they have been successfully started.

The purpose of this paper is to reveal a particular method of organization in our school, and to bring out the supervision practiced in each activity. As the facts concerning the size and equipment of the school were given in the preceding article, it will not be necessary to repeat them now.

The following activities will be taken up in order with the aim of showing the organization first—and the supervision second. The order is given exactly as it worked out in Junior High West, Arlington.

Order in Which Activities Were Organized

Student Participation in School Management
Athletics
Assembly
Orchestra
Boy Scouts; Girl Scouts
School Paper
Athletic Association
Clubs
Class Meetings
Student Council
Junior Safety Council
Home Room Organization

Before taking up the actual organization of each one of these, certain principles must be adopted:

1. Teachers in the school must be inspired to the point of acceptance of the additional load these activities bring because they are a valuable addition to their work.
2. Final policies must be approved by the principal.
3. No constitutions may be issued but only charters are given, because the student body is not an *independent* organization.
4. Participation in activities should not be based entirely upon scholastic ability, because *life* is not that way.
5. No pupil should be leader in more than two activities, nor a member of more than four.

STUDENT PARTICIPATION IN SCHOOL MANAGEMENT

With these principles in mind, let us take up each activity. Although the question of student participation in school management covers a large field, we take it up under the following headings: (1) office assistants; (2) traffic officers; (3) supply clerks; (4) lunch room assistants.

To organize the office assistants, the pupils who had study periods were drawn upon to take charge of the office, the telephone, visitors, and many other items as explained in the first article. These were all put in charge of a General Office Assistant, were given rules and regulations to follow, and handled the office entirely. For the traffic officers, a General was chosen to select his squad, certain duties were given to him and to them, and they handled the problem of passing of classes, recess supervision, and the like. Supply clerks were appointed by the principal to take entire charge of supplies; they were given keys to the supply room, and functioned with or without the principal. Lunch room assistants were selected by the domestic science teacher, and took charge of the selling of the lunches served at recess time.

This was the method used during the first year; the second year brought a change in procedure. One girl was selected as General Office Assistant for the year; it was her duty to supply the office with an assistant for each period; she took the whole responsibility, and acted as supervisor of their work. In the matter of traffic officers, each grade selected a certain number of traffic officers so that each room was represented on the squad; the General in charge was appointed from the group selected; thus a continuing organization was provided for. The next year, after the organization of the Safety Council, the traffic officers were appointed by the Council, supervised by them, and called the Safety Patrol. The psychology of traffic control is therefore "safety," not "discipline." The supply clerks and lunch room assistants had among their number members of the two lower grades, who learned their duties for the next year. Finally, to this whole group was given a printed set of regulations covering all fields so as to guide them.

ATHLETICS

The first problem in athletics is the question of what activities one will have. With gymnasium to supplement the athletic work, the problem was easier in our school. Our decision was:

For Boys

Fall—Football
Winter—Basketball, or Hockey
Spring—Baseball

For Girls

Soccer, or Field Hockey
Basketball
Field Hockey

To get a group out for these activities was a simple matter. Our next step was to make certain agreements about the use of equipment, building, and the like. Then a suitable standard for allowing participation in athletics, with the administration of the standard, needed to be issued and adhered to. These regulations were adopted:

1. That a pupil must be passing in all of his three major subjects—English, mathematics, and social science.
2. That a pupil must be passing in all but one of his elective subjects.
3. That a pupil must be satisfactory in effort and school citizenship in all his school work.
4. That a weekly check-up should be sent around to learn how the members of the team stand.

5. That if a pupil is ineligible as a result of the check-up, he may become eligible when teachers give him a note stating that his work, etc., are now satisfactory.

6. Physical examination and parents' permit for athletic teams.

This does not set too high a standard for Junior High pupils, while at the same time it allows the leeway of making up for lack of application or of courtesy. Repeated delinquency, however, causes a longer suspension from the athletic activities. The results of this policy become apparent if one follows the pupils to Senior High School, where those who have been trained under this system do not become ineligible in the course of their first year there.

ASSEMBLY AND ORCHESTRA

The question of assembly programs is the topic of the third of this series, and will be handled in full then. Suffice it to say that if they are properly built up, assemblies constitute one of the most vital parts of the school life. To require a pupil to miss the assembly is, in the eyes of the Student Council, the worst punishment which it can inflict. In connection with the assembly, the orchestra forms a very prominent part in its success; to form an orchestra merely means to talk about it, call the pupils interested together, and, after a few rehearsals, allow them to play at the assembly. From that time on, the assembly assumes a new character.

BOY SCOUTS AND GIRL SCOUTS

Some one has said that the course of study outlined in the Manual for Scouts covers everything that a child needs for life. If this is true, every school should have some connection with it. Our first connection came through the organization of an assembly given over to Scout programs. This revealed the Scouts in the school, and gave point to their organization. Since the school had a hall that was suitable for meetings, both Boy Scouts and Girl Scouts hold weekly meetings there. More than that, it should be and is the policy of the school to have some of the teachers members of the Troop committees, and actively interested in the work of the Troops. The principal, if he has not been a Scoutmaster for any time, should take it up as a part of his training, for nothing will repay him more than a course of study in "boys." Finally, to help in the interest and importance of Scouting, a section in the school paper should be given over to discussion of Scouting and reports of activities. Thus will be established a permanent connection between school teaching and life practice in the public school.

THE SCHOOL PAPER

Another very interesting activity in school life is that of the organ of expression of the students. Sometimes it is a weekly newspaper, sometimes a monthly or three-monthly magazine. Whatever it is, it will coördinate the school and give an opportunity for writers-to-be to enlist their abilities with a goal of publication before them. In many schools, an enterprising teacher will have already begun the practice on the newspaper idea. Extension of it involves the following requirements:

1. Organization of a staff composed of senior chief officers and junior assistants.
2. Obtaining of advertisements to help pay the cost of printing.
3. A good printer at a reasonable rate.
4. Typists in the school to type the copy for the printer.
5. The eager support of the teachers.
6. A good set of faculty advisers from the English Department who will not try to make the magazine a work of art but rather the result of pupils' work.

The next question is with regard to the

departments of the publication. Some of the following should be in the first issue: The Principal's Column, Literary, Editorial, Foreign Department, Boy and Girl Scouts, Jokes, and advertisements. Gradual extension should be made, and as the magazine grows larger the price per copy should be increased.

To care for the business organization, each home room should have a subscription agent who is a member of a committee of which the Business Manager is the chairman. This brings in the home room as the unit for distribution, and assures a knowledge throughout the school of the progress of the magazine. To enable the staff to hold meetings, the Club period mentioned later affords alternate Mondays of each month for a regular meeting. At this time reports of progress are made, policies are adopted, Treasurer's statements are approved, and the general business is cared for.

Two other items are of importance. If the magazine is good, it is always desirable to exchange with other schools; this calls for an exchange department, to acknowledge receipt of magazines, to comment on them, and to note ways in which their own magazine may be improved. Again, and in the same connection, leagues of school publications are being organized; to join with them is to bring both the possibility of new ideas and also the knowledge about other communities into the minds of the pupils. The principal must exercise careful supervision over the paper, be a member of the staff, and by his contributions and announcements give cordial support to it.

ATHLETIC ASSOCIATION

Since athletics are such an outstanding part of the school work, and also since they cost a great deal, almost all pupils are willing to contribute to the support of an association. A common basis to start on is that of announcing the dues per week, such as two cents, and revealing a saving if all is paid up to the end of the year. Then, to create further interest, show a banner for the first room to get 100 per cent enrolled and all paid up in the school. Two pennants for the second and third serve to make competition keen. After the association is once on a firm footing, it is wise to have a charter and officers so that future plans will be carried forward by them. To keep supervision over this organization, a teacher should be appointed to look after the accounts and the general activities undertaken.

CLUBS AND CLASS MEETINGS

Much has been said about the advisability of starting clubs in the various schools, but not always have definite ways and means been proposed to help principals to do this. Sometimes a progressive teacher will organize one of her own outside of school hours; sometimes pupils will be given a choice of two or three clubs to meet after school is over. Our method was as follows:

1. Get the teachers interested in clubs during school hours.
2. Organize at the first of the year as soon as possible after school opens.
    a. Each teacher designates not later than September 20th the club he or she will take charge of.
    b. September 20th, a list of clubs with names of teachers and rooms is announced to pupils; pupils hand in slip of paper with name, first choice, and second choice on it.
    c. One teacher takes slips, sorts according to clubs, and lists under each club in two columns, one for the first choices and another for second choices, the names of the pupils.
    d. Each teacher is given the copy of her first and second choice names, and if the number is more than 30,

cuts down the names until that number is reached.

e. The teacher posts in her room the final list of 30 names.

f. Teacher reports number of pupils in club to the office so that principal may know what clubs are closed.

g. Pupils find out what clubs they are in; if not taken in either first or second choice, pupils pass to certain rooms, designated as study rooms, on the first day clubs are held.

h. On the first Monday in October, the six-period day is made into a seven-period day; the first four periods are run off regularly; the fifth period just before recess is the Club period. Pupils pass either to the club or to study period; attendance is taken as usual.

i. Principal, with list of clubs still open, confers with pupils in study period, and sends them to the club in which they may be interested. Those who wish to study are left in charge of a teacher or pupil officer.

3. To change from one club to another after the organization is complete, the pupil makes out a written request and, after obtaining the written consent of each teacher, files the request in the office and changes clubs.

4. Pupils who do not enter into the activities of the club in a good spirit may by vote of the club be sent to study period.

This organization was actually tried out, and the number of pupils in the clubs tallied exactly with the number in school, while the whole process ran smoothly during the entire period. Such clubs as Basketry, French, Athletic, Commercial Observation, Art, Travel, Dramatic, Declamation, Mandolin, Nature, Ukulele, Glee, Building and Estimating, Science, Radio, and the like were organized with great interest.

In addition to this, the first Monday of each month, beginning in November, class meetings are held during the club period, rotating as follows: 9th, 8th, 7th. Officers are elected, the charter is drawn up, activities are planned, and a whole class spirit is built up that is not possible in after-school meetings. The principal gets usually his only opportunity to deal with pupils as a class, and he can always make good use of it. Since the members of the class do not miss their club activities, they do not object; in fact, they rather enjoy the training that the class meeting gives them.

STUDENT COUNCIL

This organization calls for leadership and judgment, but it is very essential in the policies of the school. It may be organized as follows:

1. Apportion the members of the council to the number of home rooms, giving the ninth grade more than the eighth, the eighth more than the seventh. Our scheme gives

Grade	*Each Room*
9th—4 home rooms—8 members—	1 boy, 1 girl
8th—3 home rooms—6 members—	1 boy, 1 girl
7th—4 home rooms—4 members—	1 boy or girl

2. Each home room selects its own representatives.

3. The principal appoints one man, and one woman, teacher.

4. Each member, including teachers, has but one vote.

5. Meetings are held alternate Mondays of each month, during club periods, and at call of principal.

6. Council draws up charter, passes regulations about school, and establishes Court of seven members—four ninth-grade, three eighth-grade.

With the regular meeting, and definite things to do, the Council has an interesting time. Its greatest help can come in formulating policies and in giving opportunity for student suggestions. Occasionally, the whole Council may be summoned from classrooms to decide what shall be done

with an offender against rules; is this any different from the summoning from the world business men to serve on the jury? Thus in the establishment of a Student Council much that is wholesome will result to further the needs of the coming generation.

JUNIOR SAFETY COUNCIL

At the present time, with the ever-increasing number of automobiles as well as the sufferings from fires, disease, and accidents, preparation for good citizenship along safety lines can never be overdone. In the course of Social Science, a definite part of the work should be allotted to "Safety First" in many ways; the ideals and principles must be taught through this course. Yet, to function well, an organization should be established to give practice to the ideals, as well as to check up the whole school on what it is doing.

This organization may well be called the Junior Safety Council. To create interest in it, a member of the State Safety Council is almost always available to come to the school, and in the assembly period give not only an excellent talk on "Safety First," but a film showing the story of the accident world. A few school cheers with *Safety First* on the end of them will help to start pupils thinking about the ideal. Then, to organize the Council, find out if the student body is back of the movement; if so, call for the selection of three members from each home room, members who are not in other activities, who will serve on the Council. One teacher interested will meet them and encourage them to draw up the charter, choose officers, visit other safety councils, and hold regular meetings. When the time is ripe, a member of the State Council will come to the assembly to induct the Council into office by presenting them with the Safety Council button, and the school rises to support the pledge to Safety. Meetings are then held on alternate Mondays during club periods and at special call of the Advisory Board.

The pupils are eager to make this idea function, and will establish a court to try offenders against the rules. More important still, these same pupils will begin to notice about the building and grounds the necessary improvements for Safety, and will make them. Thus in them, and through them in the school, an attitude of looking out for safety is not only taught but practiced.

SUGGESTIONS FOR POSSIBLE HOME ROOM ORGANIZATION

POSITION	NUMBER OF MEMBERS IN EACH		
	GRADE 7	GRADE 8	GRADE 9
Safety Council	3	3	3
Student Council	1	2	2
Health Captains (2 teams)	2	2	2
A. A. Room Collector	1	1	1
Subscription Agent, *Beacon*	1	1	1
Traffic Officers	1	2	3
Housekeeping Committee	3	3	3
Penmanship Committee	3	3	3
Scholarship Committee	3	3	3
Room Program Committee	3	3	3
Attendance Committee	6	6	6
Sub-Treasurer Class	1	1	1
News Reporter (Room)	1	1	1
Home Room Council	3	3	3
	32	34	35

HOME ROOM ORGANIZATION

The last item on our list has been the Home Room Organization. This, with a questionnaire which found out the activities to which the pupils belonged, formed a very important means of supervising and keeping within bounds all the activities of the school. As will be seen below, a suggested organization is outlined; following that, the questionnaire shows the check-up.

Health Captains: to check Decalogue of Health as on bulletin on first floor.

Housekeeping Committee: to care for desks, floors, temperature, curtains, blackboards, dusting, and cleanliness.

Penmanship Committee: to watch the penmanship of members of the room and to help in furthering the work of Hospital Class.

Scholarship Committee: to ascertain Honor Roll each marking period, encourage additions to it, and post it, so that at end of year letters will be awarded those on the honor roll for all year.

Program Committee: to plan programs of jokes and short scenes for morning program. They might handle the Bible reading and prayer.

Attendance Committee: one child for each row, and one captain to record attendance, to take care of absence notebook, make-up cards, and to bring up standard generally.

Home Room Council: to be responsible for cases of conduct of members of home room; to hold meetings and judge when written statements from office are sent to them.

POLICIES AND TEACHER LOYALTY

It is understood by members of the school department, and particularly of Junior High West, that if a policy is or has been put into effect or an administrative requirement has been made that is contrary to a teacher's convictions based upon principles of action, teacher may, by conferring with the principal, expressing his convictions, and revealing his principles of action, discuss the policy or administration, and if not convinced, and if he asks for the permission, may be granted the right to try out a scheme which will bring the same results as the policy or administration put into action previously. If the results are satisfactory, the teacher's policy may stand; if not, teacher must revert to original policy.

Thus, loyalty does not consist in accepting as inevitable the policy laid down, but in working with the principal to form the best policy for the children.

JUNIOR HIGH SCHOOL WEST,
ARLINGTON, MASS.

To Pupils:

Below is a set of questions which I wish you would answer with all seriousness. It will help both you and me in doing the best work for your future. Help me, please!

F. P. HAWKES, Principal.

Date.....

1. Name .....
2. Address .....Telephone No. .....
3. Parent's Name .....Occupation.....
4. Address of Parent's Business...Tel. No....
5. Your Date of Birth.....Place.....
6. Your Grade.....Your Home Room.....
7. Elective Subjects Taken by You.....
8. Name three vocations in order of preference which you want to prepare for.
   1. .....2. .....3. .....
9. If you are going to college, which one?
   .....
10. Are you working at any job in the afternoon? .....Name of employer .....Address of his place of business .....
11. What hours do you work there?.... to .... weekdays, ... to .... Saturdays.
    (Note: These questions are to help us not to ask too much of you, either of home work or outside activities.)
12. Do you want to get some work to do in the afternoon? ..... What kind?
    (Suggestions: Caring for children; store work, paper route, caddying; name special kind.) .....
13. Do you take lessons in the following lines: Answered: Yes or No. Music lessons? ..... What instrument? .....

Elocution lessons? ..... Dancing lessons? ..... Other lessons? ..... Name it .....

14. Day of lesson. Time of lesson. Length of lesson. Practice.
    (1) ....
    (2) ....
    (3) ....
15. Sunday is a day which we all should observe by going to church to worship God. Please answer the following in that spirit:
    (1) Do you belong to a Church? .....
    (2) Do you attend? .....
16. Do you belong to organizations which meet regularly in the afternoon or evening? (Boy or Girl Scouts, Campfire Girls, etc.)
    (1) Name of Organizations: a... b...
    (2) Day of meeting: a..... b.....
    (3) Length of meeting: a. From.... P. M. to .... P. M. b. .... to ....
    (4) Does it take much time outside of the meeting time? ..... How much? a. .... hrs. b. .... hrs.
17. How long does it take you to come to school? ..... min.
18. What time do you *generally* get home from school? ..... P. M.
19. How long *generally* do you spend on your home work each night? Be square about this, please. ..... hrs. ..... min.
20. What is your *usual* bedtime? ..... P. M.
21. How many hours do you have of sleep on the average? ..... hrs.
22. What time do you rise in the morning *usually*? ..... A. M.
23. Do you have a radio in your home? ..... (Answer Yes or No.)
24. Are you taking the Home Nursing Course? (Girls only) .....
25. How much time do you spend each day helping at home? ..... hrs.
26. What subjects do you like? .....
27. What subjects don't you like?.....
    a. Give reasons for not liking them .....
28. Please put a check to the left of all of the following groups of which you are a member:
    ....Traffic Officer
    ....Lunch Room Assistant
    ....Safety Council
    ....Office Assistant
    ....Athletic Ass'n Rm. Collector
    ....Student Council
    ....Orchestra
    ....School Paper Staff
    ....Football Team
    ....Basketball Team (Boys or Girls)
    ....Baseball Team
    ....Dramatics I Club
    ....Building and Estimating Club
    ....Declamation Club
    ....Ukulele Club
    ....Science Club
    ....Glee Club
    ....Athletic Club
    ....Boy or Girl Scout
    ....Girls' Band
    ....Soccer Team
    ....Hockey Team
    ....Basketry Club
    ....Dramatics II Club
    ....French Club
    ....Art Club
    ....Mandolin Club
    ....Travel Club
    ....Commercial Observation Club
    ....Campfire Girls
29. Please check before these offices those you hold.
    (1) ....Pres., ...V. Pres., ...Sec'y, ...Treas. of your Class.
    (2) ....Pres., ...V. Pres., ...Sec'y, ...Treas. of your Club.
    (3) ....General Office Assistant; ....General of Traffic Officers.
    (4) ....Pres., ...V. Pres., ...Sec'y, of Student Council.
    (5) ....School News Reporter; .... School Paper Business Manager.
    (6) ....Pres., ...V. Pres., ...Sec'y, ...Treas. of Safety Council.
    (7) ....School Paper Editor; .... Supply Clerk.
    (8) ....Captain, or ....Manager of ....Team.

(9) ....Home Room Helper in....
Thank you for your coöperation; you have helped us both.

F. P. HAWKES, Principal.

(Space below reserved for principal.)

I. Q.—1)..... 2)..... Assembly Programs 1 2 3 4 5 6 7 8
Special Conferences: 1 2 3 4 5 6 7 8

Finally, what shall we say if these activities appear to parents and teachers to be taking too much time? We shall have to admit that we do or do not believe in a certain principle:

> Academic work should occupy only 50% of the pupil's time; the other 50% should be employed in practice of the principles taught.

This it seems clear is the only way in which we shall train our boys and girls to live as they intend in the world, having wholesome interests and rendering service in their life work.

Nevertheless, we shall have to answer this question by furnishing the proper supervision. Supervision of the direct kind is provided by the presence of a teacher in each of the activities. Another indication of supervision is shown in the proper building up of check-ups in various lines, so that the school work will not suffer. And finally, the vocational guidance side of the question furnished by the questionnaire, the intelligence tests, and the practical omnipresence of the principal in the classroom will reveal the weaknesses and the strong points of each pupil. This will lead to diagnosis of any trouble; eventually to removal from activities because of lack of ability to keep up; but never to entire removal from all activities because the home room organization will always use the pupil in some way.

Adequate supervision is the answer to the question, supervision that ends only in knowing the pupil as a whole, and that refuses to be tied in the office to clerical or administrative detail. The personal equation is far more powerful in the making of good citizens than all the attention to detail we can have; nevertheless, to have both is to be an able supervisor of extra-curricular activities.

THE CLEARING HOUSE

PRINTING PRESS PROJECT —FIRST-A GRADE

This project was carried out last year in my 1-A grade. There were thirty-one children in the grade. The parents of the majority of the children are of foreign birth, so they have a rather meagre background. It was an average grade in ability. Most of the children had had the advantage of free work in the kindergarten and one term in the first grade.

The project was initiated entirely by the children. We had one large rubber stamp printing press in our room, but only three or four children could use it conveniently at one time. It was constantly in use for printing words which they wished to study, or original stories which they desired to have in printed form.

One morning, during the free work period, I found three boys talking earnestly in a corner. They told me that they wanted to make a printing press so that they wouldn't have to wait their turn at the single press. With one of the boys acting as leader, they started industriously to print letters on squares of paper and put them in a box partitioned into rows by strips of stiff paper. Soon, however, they were dissatisfied and felt uncertain about proceeding further. I called their attention to the material used in the printing press but heard no more of the idea for three days, when a small boy came in breathlessly dragging an old inner tube from an automobile tire. The original group had been disinclined to start work and were very evidently waiting for this material, as they were not in the least surprised. I asked them if the rubber would make an impression with ink. They immediately tested a piece and found to their satisfaction that it did work beautifully. They cut the rubber with scissors, though it was thick and quite difficult to cut. I supplied old wooden inch cubes on which to glue the rubber letters.

At first they drew the capital letters or cut them out freely. Then they discovered that with so many workers the letters were not uniform, so they corrected this difficulty by using our finished set to stamp a pattern on the rubber. Our next difficulty was with the small letters. Many were glued so that they stamped backwards. They were more careful after that to mount them correctly.

The children supplied some of the boxes for their work and I helped with boxes when they could not supply their own. To aid themselves in correctly arranging the letters, the children sometimes referred to alphabet cards when they could not recall the letters of the alphabet. They made ink pads of scraps of heavy woolen cloth glued in thin tin boxes and inked with heavy ink. One child marked his cubes with small paper letters on the reverse side. Others used pencil letters. In all, eight complete sets were made with capitals, small letters, and numbers up to ten.

When the project started there were two small groups with strong leaders and two children working alone. Gradually others became interested and several groups were formed. The leaders changed often after this, so that a great many had the opportunity for leadership.

We had several meetings to discuss the work and valuable suggestions were contributed by the children toward good habit formation, especially in the use and care of the material required, also suggestions as to the arrangement of the work in the

boxes and the means of keeping up our supply of materials.

Some of our good kindergarten friends aided us by supplying more old unused blocks and bits of wood to be sawed into blocks. This called for a letter of thanks to express our gratitude. At that time the children chose to write their letters from blackboard copies. Finally, one child transcribed a printed letter from parts of the written copy, with his partially finished press.

We then made a very interesting visit to our printing room in the school. We saw the setting up of type and watched the hand press work. The teacher compared the parts to their type of press so that they understood it. This aroused an interest in newspaper words and gave them some drill in words. They thus gained considerable interest and power in reading, which they needed.

After this visit we composed oral stories in connection with the American Indians and the early settlers, which we were interested in at that time. These stories I printed with small type so they could make books. Later we made Christmas books.

The project was initiated, purposed, and planned by the children. It required great patience and concentration as the small letters especially were difficult to cut. This required the sharing of a pair of pointed scissors to cut out inside portions. I felt they gained in independence and in neatness in handling such material as glue and the saw without injury to their clothing or to the room; also in keeping their work orderly in the cupboard. This work had to be taken out and put away many times as it was carried on with all the usual work in the grade. They frequently counted, estimated, and reviewed the alphabet. Their interest in books and reading was increased. There was a greater incentive for good original stories. Gradually they came to print their stories with very little or no help in spelling. The words which they did not remember were looked up in a book or spelled phonetically.

The work required good thinking and planning. There was a great deal of estimating of quantities of material so that they could appeal to some source of supply if necessary. We used several tires contributed by different children who usually controlled the distribution of the rubber. The work was carried on harmoniously. All of the children took great pride in one another's work. The sharing of material and labor was very unselfishly arranged. Often a child did not care to do the work necessary to complete a set himself but would gladly help some one else to complete his set. It required great perseverance. The work was hard and they would voluntarily put it away for a few days rest. Often it took as long as two school months to complete a set, but each one was finally finished.

Usually an enthusiastic audience surrounded the printer when he used his own press. I always kept a supply of pictures for their use to illustrate or motivate the stories. We printed these stories upon half sheets of unprinted newspaper as it is inexpensive and serves the purpose very well.

The children had a great deal of enjoyment out of the project and were delighted when their letters really printed almost as well as the original set. At promotion time they were allowed to take their sets home and as they have very little in their homes they have made worthwhile toys. Some of them said they needed paper to print on, but were satisfied when I suggested their using wrapping paper. We also found the rubber was good for other things, such as hinges for articles made of wood. I am adapting the idea to supplement a set of animal stamps.

Pictures furnished the motive for the following original stories printed by the children.

Santa Claus came with his bag of toys and gave them away. Mother and Father said, "Thank you very much."

Christmas is coming. Santa Claus is coming with his reindeer, bells, and sleigh. Santa Claus comes with toys.

This little girl came on this boat. She came from Russia. She came with her father and mother. When she began to go to school she was very happy. (By a child who came very recently from Russia.)

Two Puritan girls are going to church. When they went to church they carried a prayer book.

There is some water in Niagara Falls. The water rolls over the hill. The boats are going down the hill.

HAZEL A. DOCKSTADER
School No. 26
Rochester, N. Y.

AS REPORTED

TEACHER TRAINING IN GERMANY

School Life for September reports that the preparation of teachers in Germany is now in a state of transition. All who are candidates to be teachers must pass an examination that gives evidence of thorough general and professional training. Heretofore, however, this training has been given altogether in teachers' seminaries in which only the first years were devoted to general education, while the later years were devoted to professional training. The standing of persons trained in these seminaries is not equal to those who have attended the gymnasia and the universities. There is a considerable difference between the two groups, both in salary and in social position. There is, accordingly, in Germany at the present time a strong movement to bring about a change so that teachers of the elementary schools shall have the privilege of attending higher schools in preparation for university courses and in the latter finish their training and receive degrees which will give them a standing comparable to that now attained by teachers in secondary schools.

PROGRAMS FOR TEACHERS' MEETINGS

Baltimore County, Maryland, is well known for the efficiency of its supervision. Among the plans which are regularly followed out is that of providing teachers with definite programs for their state meetings. The recent examples which follow would doubtless prove suggestive to supervisors elsewhere.

TWO-TEACHER GROUP—PRINCIPALS

I. Administrative Matters—Mr. Clarence G. Cooper, Superintendent.

II. Progress made toward the achievement of the three objectives outlined in the Baltimore County Tentative Course of Study in Reading.

1. What abilities have you aimed to develop in meeting the standards set for silent reading in your grade?

References: *Maryland School Bulletin*, "Silent Reading," pp. 29-61.
LaRue: *The Child's Mind and the Common Branches*, Chapter 14.
Stone: *Silent and Oral Reading.*
Objective II—Tentative Course of Study in Reading for Baltimore County.

Note: Check the three suggestions which you have found most valuable for each of your grades.

2. How may we attain the State-wide Objective which aims to achieve better results in silent reading through the use of history and geography material?
3. What opportunities are you providing to create a desire for, and to give training in, oral reading?

a. What standards have you developed for judging the effectiveness of a pupil's oral reading?

References: LaRue: *Child's Mind and the Common Branches,* pp. 295-299. Pennell and Cusack: *How to Teach Reading.*

Objectives I and III—Baltimore County Tentative Course of Study in Reading.

Note: Select one point under each of four topics given for Grades IV–VII which you have found most effective in attaining the standards for oral reading.

Course of Study for Baltimore County (bound copy) pp. 2, 19, 23-24, 58, 65.

III. Constructive suggestions for the improvement of oral and written composition:
1. Developing the story.
2. Criticizing the story.

IV. Summary of recommendations made by the group for eliminations and changes of the pupil's report card.

V. Minimum essentials of elementary school music.

Note: Please bring to the meeting:
1. The three printed sheets outlining the Tentative Course of Study in Reading for Baltimore County.
2. The *Maryland State Bulletin,* "Silent Reading."

Points to Remember in Improving Our Oral and Written Composition

Criticism means *help.* A pupil who cannot improve a sentence or story is not ready to suggest that it needs improvement.

I. The subject:
1. Well chosen (select a subject in which you are very much interested).
2. Know your subject thoroughly.
3. Be sure your subject *does not* cover a long period of time.
   a. Limit your story to *one brief incident* of an interesting day, rather than telling about the entire day.
4. Does the title suggest the *point* of the story?
   a. Give the audience a hint as to what the story will be.
5. Make your title short.

II. The story:
1. Does your story have a *point* or purpose for which it is told?
2. *Have a definite plan,* know it clearly, select and arrange your material accurately according to your plan outlined. Form the habit of clear thinking before speaking or writing.
3. Win your audience by the first sentence.
   a. Make the beginning sentence suggest what the story is to be about in order to interest your audience and make them wish to hear the rest of your story.
4. In the beginning sentence hint at but *do not* tell the *point* of your story. Keep your audience in doubt as to how the story ends.
5. Make each sentence tell *one thought.*
6. Make each sentence stick to the point, telling the story *step* by *step.*
7. Make every sentence in the story help to lead to or tell the interesting part of the story.
   a. If one or more sentences tell nothing about the interesting point, they do not belong to the story.
8. Does your last sentence make you feel satisfied with the way the story ended?
   a. Did you feel that the story was complete?
   b. Does the closing sentence fit the title?
   c. Does the story sound finished?

d. Does the audience feel satisfied with the outcome?

e. Did the closing sentence tell how the incident made the story-teller feel? (Pupils' own feelings or opinions.)

9. Use well-chosen expressions, as "distant lands far beyond the sea."
10. Make use of *new* words learned.
11. Word pictures made by carefully chosen *"artist words."*
    a. Words that help us to imagine some object or to picture in our minds some event.
       Ex. 1. The fat little kitten went across the lawn like a streak of light.
       2. *Chilly, c o l d, bleak, frigid,* as words picturing a season.
    b. *Adjectives* and *adverbs* are especially helpful to make the hearer see distinctly what the subject is doing.
12. Use correct English.
13. Avoid repetition of the same words or phrases at beginnings of sentences.
14. Use conversation, questions, and exclamations when possible.
15. Use no more *ands* than are absolutely necessary.
16. Improve sentences by using varied "connectors" to combine short sentences.
17. Make sentences clear-cut.
    a. Could you count the sentences easily because the story-teller dropped his voice and paused after each sentence?

In oral composition, in addition to the 17 points above include:

18. Use conversational tone of voice.
    a. Did his voice sound natural when he was telling the story?
    b. Did it sound as it does when he is talking to you alone?
    c. Was it a pleasing, well-modulated voice?
19. Stand straight and face the class.
20. Speak distinctly. Put endings on words (*ing's, t's, d's,* and other final sounds).
21. Pronounce correctly all the words used.

III. Types of subjects.

1. Experience stories (personal incidents).
2. Explanations (convincing some other person that your plan is a good one).
3. Expressing your opinion. (Debating an issue or a question. An opinion to be worth anything must be the result of study of all sides of the question. "Snap judgments" are rarely sound.)
4. Giving directions.
5. Directing a stranger.
6. Directions for doing things.
7. Anecdotes (short, interesting and sometimes amusing incidents in the life of some person, usually showing something of the character of the person concerned—Columbus, Washington, Lincoln, Raleigh, Roosevelt).
8. Reproduction (outlining and retelling a long story, making your audience feel acquainted with the characters in your story).
9. Dividing a story into acts and scenes.
10. Preparing a play for dramatization.
11. Telling a story from a picture.
12. Letter writing.
    a. Form { heading / salutation / close }
    b. Addressing the envelope.
    c. Folding the letter.
    d. The telegram.
13. Completing stories.
14. Diaries (a record of your best experiences).
15. News stories or school items for publication.
16. Book reviews.

Note: The above represents a compilation of the best ideas on criticism from current texts on English and from actual practice of teachers and pupils as observed in the classrooms of the Middle Zone Group. Texts reviewed by teachers and supervisor included:

Young and Memmot: *Methods in Elementary English; Good English in Speaking and*

Writing, Appleton; Briggs, McKinney, Skeffington: Seventh Grade Text, Ginn; Bryce: *Language Training,* Newson & Co.; Cowan, Betts, Charters: *Essential Language Habits,* Silver, Burdett & Co.; Wohlfarth & Mahoney: *Self-Help English,* World Book Co.; Manly, Bailey, Rickert: *Lessons in English,* D. C. Heath & Co.; McFadden English Series, Rand McNally.

A BULLETIN ON WORD STUDY

The G. & C. Merriam Company of Springfield, Massachusetts, has begun the publication of a periodical called *Word Study,* which is offered free to English teachers. The first number contains four pages devoted to such topics as "What is an Idiom?" "Suggestions for Classroom Exercises in the Study of Opposites," "English Words in France," and an account of the work of the Committee on the Place of English in American Life. The standing of the publishers is sufficient guarantee that the material will be of real service.

THE CONFERENCE IN FEBRUARY

All who are interested in the National Conference on Educational Method are asked to remember the annual meeting, which will be held in Washington, D. C., the last week of February, in connection with the annual convention of the Department of Superintendence of the N. E. A. The Conference is arranging two half-day programs, a luncheon for its own members, and a luncheon jointly with the members of the National Council of Primary Education. Special emphasis in the program will be placed on the topic of Supervision. It is hoped that there may be a large attendance of persons who are engaged in the work of this field. All such are asked to send their names in advance to the President of the Conference, Miss Mabel E. Simpson, who can be addressed at 405 West 118th Street, New York City.

DEPARTMENT OF ELEMENTARY SCHOOL PRINCIPALS OF THE N. E. A.

The sixth midwinter meeting of the Department of Elementary School Principals will be held in Washington, D. C., coincident with the meeting of the Department of Superintendence. Three full sessions will be held on Monday, Tuesday, and Thursday afternoons in the new auditorium; speakers of national repute are being secured to address these meetings. On Wednesday afternoon the home office of the National Education Association, conjointly with the National Geographic Society, will offer a program. On Tuesday morning at eight o'clock, at the Hotel Washington, an official breakfast will take place, at which it is important that all officers, members of the executive committee, and chairmen of other committees be present.

SUPERVISORY COUNCIL OF SOUTHERN MICHIGAN

The elementary grade school supervisors of the towns and smaller cities of Southern Michigan have organized a Council of Supervisors. The group consists of about thirty members. During the past three years, the group has met from two to three times a year for an informal discussion of supervision problems. In May, 1925, they met at Kalamazoo, Michigan. At that time plans were made for an extended study of curriculum problems with special reference to the social studies.

The next meeting of the Council will be held in Jackson some time during the month of October. At that meeting reports of progress on the work undertaken in May will be given and plans for the year outlined. The chairman and secretary of the Council for the present year are: Miss Anne Wiggins, Assistant Superintendent of Schools, Flint, Michigan, and Miss Edith Bader, Supervisor of Elementary Grades, Ann Arbor, Michigan.

THE READER'S GUIDE

ON TEACHING ENGLISH

No other school subject has been so extensively written up in recent years as reading. Yet the succession of new books seems to be justified for the most part by the additions made. Certainly primary teachers will welcome Miss Smith's *Hundred Ways.*[1] The writer seems to be familiar with the recent literature and aims merely to supplement it with specific devices in keeping with the scientific principles which have been laid down. The exercises are grouped under the heads: "To Increase Speed," "To Increase Comprehension," "Selection," "Organization," "Retention," and "Skimming." These will be recognized at once as current phrases intended to distinguish certain outstanding abilities which the work in silent reading should aim to cultivate. The exercises are ingenious and will prove useful as additions to the equipment which most teachers of reading have.

Miss Wohlfarth's treatment of the teaching of composition is more inclusive.[2] To begin with, she covers the work of all elementary school grades and even includes that of the ninth. She treats, moreover, of a wide range of topics and these somewhat in detail.

The point of view of the book is the same as that of the series of children's texts which it is intended to accompany, namely, that pupils should be taught to evaluate and direct their own work. A fair balance is struck between oral composition on the one hand and written composition on the other.

Directions are given as to the use of the textbooks in the author's series, and schools in which that series is adopted will profit especially by this manual. All teachers of composition in the elementary school will, however, find it suggestive and quite worth while.

STUDIES IN READING

The scientific investigation of reading, in which Huey, Judd, and Dearborn were the pioneers in this country, has attained a volume and significance that only such comprehensive reports as the two recently edited by Dean Gray could enable us to realize. The Report of the National Reading Committee was summarized in the *Third Yearbook of the Department of Superintendence,* but appears in full in the *Twenty-Fourth Yearbook of the National Society for the Study of Education,* Part I.[3]

A broad field is covered. The editor summarizes recent articles on the place of reading in contemporary life and outlines a reading program for the schools. Miss Jenkins shows how to develop a meaningful vocabulary. Professor Horn lists suitable materials. Professor Leonard classifies reading experiences and explains how reading is related to the study of literature. Miss Wilson writes of the relation of reading to other school subjects. Miss Zirbes reports on reading tests and gives directions for "remedial" work. Finally, Superintendent Ballou and Miss Hardy deal with the problem of ways and means of carrying out a reading program.

The monograph was intended to gather up and make readily available the results

[1] *One Hundred Ways of Teaching Silent Reading.* By Nila B. Smith. World Book Co., 1925.
[2] *Self-Help Methods of Teaching English.* By Julia H. Wohlfarth. World Book Co., 1925.
[3] Public School Publishing Company, Bloomington, Ill.

of study and experience in this field for practical workers in the schools. This aim has been so well realized that the document may fairly be described as "indispensable." It is well organized, untechnical, and moderate. The committee was well-balanced and had the good sense to seek counsel of many other students of the subject.

Supervisors and principals should master the contents of the report and check up their reading programs by it. Teachers should be encouraged to study it. A carefully selected library of books and monographs on the subject should be gathered in each school to supplement it.

No individual who is informed will, of course, accept such a report without reservations. Standards of attainment in terms of the number of words read per minute, for example, are at present, at least, doubtful. It depends—upon the occasion, upon the personal equation, and upon the familiarity of the subject matter in the case of each individual reader. The quoted rates should be regarded at most as only loose approximations. Far more than quantitative standards we need methods of determining whether a pupil gets the point of what he reads.

The lists of materials for reading are apparently *ex cathedra*. An extensive bibliography is printed before the lists, it is true, but there is little indication as to how previous studies were utilized. Either such work as that of Uhl's is sound and should be built upon, or it should be discarded. Certainly the time for the exercise of unaided individual taste in selecting reading for children has passed. As a winnowing of previous lists, the recommendations appear to be excellent. The committee has at any rate made it easily possible for the reader to look the matter up for himself.

[1] University of Chicago, School of Education.

The newest contribution in the book is undoubtedly to be found in the chapter on tests. Classroom teachers have at times very unwisely been urged to use the "standardized" tests in their daily work. They should instead prepare practice tests of an informal sort to suit the class and the materials they have in hand. Miss Zirbes has made an excellent beginning of this good work.

Gray's *Summary of Investigations Relating to Reading*[1] is at once more limited and more exhaustive. It is confined strictly to the task of presenting in a single volume the results of scientific studies in this field to date. The work has been painstakingly done and leaves the investigator in this subject small excuse for not beginning where others have left off. An annotated bibliography of 436 titles and a good index fit the work for general library use.

A JOURNAL OF AMERICAN SPEECH

Those conservatives who argue that the use of the term "American speech" is not justified will be shocked to learn that a monthly magazine bearing the title *American Speech* has just been launched by the Williams and Wilkins Company of Baltimore, under the editorship of Professor Louise Pound of the University of Nebraska.

The leading article is by Professor McKnight, of Ohio State University, on the topic "Conservatism in American Speech." This may be said to represent the purpose which the new magazine is to serve, namely, to make the results of scientific investigation in the vernacular as used in the United States generally known. The article is at once scholarly and readable. The writer follows the historical method, tracing the beginnings of American speech from the seventeenth century form of English brought to America by English

colonists. He ends with the hopeful assertion that something of daring and independence in the use of language seems to be at least on the way to achievement in our country. Whether all will agree that the language used by Arlen in *The Green Hat* presents a typical parallel is by no means certain.

The contribution of the editor is a short and entertaining account of "The Kraze for 'K'." There is, it appears, "no mistaking the kall of 'k' over our kountry, our kurious kontemporary kraving for it, and its konspicuous use in the klever koinage of kommerce." Miss Pound has a saving sense of humor that augurs well for the success of this new venture in the purveying of the product of scholarship engaged in the study of our speech.

SIGNIFICANT ARTICLES

MUSIC IN THE SCHOOLS

The *Journal of Education* for October first is a special number emphasizing the subject of music in the public schools. The editor, Dr. A. E. Winship, is at his best in an editorial on "Appreciation of Appreciation." He fills two pages with pungent paragraphs, each as quotable as Emerson's paragraphs used to be.

Other writers are Edward B. Birge of Indiana University, Dr. Otto Miessner of Milwaukee, Albert E. Brown of the Ithaca Conservatory of Music, Charles A. Fullerton of Iowa State Teachers College, and Edwin N. C. Barnes of Washington, D. C. All the articles are aimed not at the music specialist but at the general practitioner. Dr. Winship has done a genuine service in calling the attention of educators to the subject of music. America, as is well known, lags behind European countries in the treatment of this subject, though in the long run no other is capable of contributing more to human happiness.

A PUBLIC-SCHOOL CATECHISM

The *Pennsylvania School Journal*, through its October number, has performed a real service not only to the school people of Pennsylvania but to interested readers elsewhere by presenting a comprehensive catechism on public school questions. These are grouped under the heads of History and Purpose, Administration, Control, Finances, Statistics, Teachers, Consolidated Schools, Extension Education, Vocational Education, Health Transportation, Attendance, Curriculum, Special Education, and High Schools. If we might have similar treatments of the main facts as to education in each of the other states, we should be in a position to make comparisons and arrive at the truth concerning education in America much more readily than we can at present. State journals of the several states, please take notice.

A MCANDREW CHAT

William McAndrew has been talking in his inimitable manner to the teachers of Chicago, and through the *Chicago Schools Journal* for September we are permitted to overhear his remarks. They took the form of a series of well-rounded literary essays on such topics as "Canuting the Boss," "A Gentle Emphasis Upon Equality," "Democracy and Litter," "Success and Looks," and "The Courtesy of Good Clothing." Under the latter head one looks in vain for any suggestion that teachers wear smocks, though the newspapers insist that Mr. McAndrew is responsible for that suggestion. As a matter of fact, his advice throughout is most sensible and most easy to take because of the charming manner in which it is given. There are few, if any, in the field of education who can so entertain while they inform as Mr. McAndrew.

THE CONSTRUCTION OF EDUCATIONAL MEASUREMENTS

In one of the most complete surveys of the field so far attempted, Dr. S. A. Courtis, of the University of Michigan, presents in the *Scientific Monthly* for September a discussion of the present status of the field of educational measurements and the pressing needs of the immediate future. After a brief summary of the history of scientific method in education, he shows by a series of illustrations what the present technique of scale construction is, in the course of which he passes in review typical tests in several of the school subjects as well as in the field of physical examination. He concludes that education as a science has fairly adequate instruments but needs the services of better trained men who have the leisure to use them in the detailed investigations necessary to sound conclusions. By 1945 we shall be able to say that we have fairly attained to a science of education.

THE NEW BOOKS

Health Training in Schools. By Theresa Dansdill. National Tuberculosis Association, 370 Seventh Ave., New York.

Silver Pennies. By Blanche J. Thompson. New York: Macmillan Co., 1925. Pp. 138. Illus.

Problems of Home Economics Teaching. By Leona F. Bowman. University of Chicago Press, 1925. Pp. 146.

Silas Marner. By George Eliot. Winston Companion Classics. Philadelphia: John C. Winston Co., 1925. Pp. 315.

The Correction of Speech Defects. By Helen M. Peppard. New York: Macmillan Co., 1925. Pp. 180.

The Book of Plants. By Bertha M. Parker and Henry C. Cowles. Boston: Houghton-Mifflin Co., 1925. Pp. 252. Illus. $.88.

Story-Adventures—Fourth Year. By Ambrose L. Suhrie and Myrtle G. Gee. Philadelphia: Hinds, Hayden and Eldredge, 1925. Pp. 319. Illus.

School History of the American People. By Charles L. Robbins. Pp. 606. Illus. $1.72.

Genetic Studies in Genius—Volume I, Mental and Physical Traits of a Thousand Gifted Children. By Lewis M. Terman. Stanford University Press, 1925. Pp. xvi + 648.

The Pathway to Reading—Third Reader. By Bessie B. Coleman, Willis L. Uhl, and James F. Hosic. Newark, N. J.: Silver, Burdett & Co., 1925. Pp. 247. Illus.

High Lights of Geography—North America; pp. 358. *Europe;* pp. 320. By David Starr Jordan and Katherine Dunlap Cather. Yonkers, N. Y.: World Book Co., 1925. Each, $1.44.

IN PAPER COVERS

Practice Tests in the Fundamental Operations. By Vesta Reaver. Chicago: Plymouth Press, 1924. Pp. 48.

The Social Studies. Course of Study for Senior and Junior High Schools, Baltimore, Md., 1925. Pp. 578.

University of Illinois Bulletins: No. 23, *Teachers' Difficulties in Reading and Their Correctives.* By Ruth Streitz. Pp. 35. $.30. No. 25, *Reporting Educational Research.* By Walter S. Monroe and Nell B. Johnston. Pp. 63. $.50.

The League College. National League of Teachers' Associations Bulletin No. 14, April, 1925. Vocational High School, Minneapolis, Minn.

Reading Interests Compared with the Content of School Readers. By Emma B. Grant and Margaret L. White. A Reprint of two articles from the *Teachers College Record,* Teachers College, Columbia University, New York City, 1925.